

**GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IMPACT ASSESSMENT DIVISION)
NON-COAL MINING SECTOR**

SUMMARY RECORD OF 14TH MEETING OF THE COMMITTEE OF THE RE-CONSTITUTION OF EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF NON-COAL MINING PROJECTS CONSTITUTED UNDER THE EIA NOTIFICATION, 2006.

The 14th meeting of the Re-constitution of Expert Appraisal Committee (EAC) for Environmental Appraisal of Mining Projects (Non-Coal) of the Ministry of Environment, Forest and Climate Change was held during 3-4 May, 2023 through video conference. The list of participants is annexed herewith. The list of participants is annexed herewith. After login of the Committee Members through video conference link provided by NIC, discussion on each of the Agenda Items was taken up ad-seriatim.

(1.0) Deliberation & Circulation on the Minutes of 13th EAC (Non-Coal Mining) meeting held on 17 April, 2023:

The minutes of the 13th EAC meeting held on 17 April, 2023 were placed before the members of the EAC.

Day 1: 3rd May, 2023 (Wednesday)

1.1 Lakheri Limestone Mine of M/s. ACC Ltd with Limestone Production Capacity of 1.5 Million TPA and OB Waste: 1.96 Million TPA with Total Excavation: 3.46 MTPA along with existing wobbler & screening plant of 400 TPH in the mine lease area of 1516.88 Ha, located at Villages Gendoli Kala, Gendoli Khurdh, Pholai, Gutha, Mahuwa, Dangaheri, Budel, Kankra, Chamavali, Uttarana, Lakheri, Sakhoda, Nayagaon & Papadi, Tehsil: Indergarh, District: Bundi, Rajasthan -[F.No: J-11015/167/2018-IA.II(M), Proposal No: IA/RJ/MIN/426653/2023; Consultant: M/s J.M. EnviroNet Pvt. Ltd.] - Revalidation of EC under MoEF&CC Notification S.O 1530(E) dated 6thApril, 2018

The instant proposal is for revalidation of EC under MoEF&CC Notification S.O 1530(E) dated 6thApril, 2018 of M/s. ACC Ltd for mining of Limestone with Limestone Production Capacity of 1.5 Million TPA and OB Waste: 1.96 Million TPA with Total Excavation: 3.46 MTPA along with existing wobbler & screening plant of 400 TPH in the mine lease area of 1516.88 Ha, located at Villages Gendoli Kala, Gendoli Khurdh, Pholai, Gutha, Mahuwa, Dangaheri, Budel, Kankra, Chamavali, Uttarana, Lakheri, Sakhoda, Nayagaon & Papadi, Tehsil: Indergarh, District: Bundi, Rajasthan.

2. The details of the project as ascertained from the document submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

- i. The mine lease area is located between Latitude: 25°31'54.6"N to 25°39'39" N and Longitude: 75°56'46.4"E to 76°15'27.2"E. The mine lease area falls under the Survey of India Toposheet No: 45 O/14 & 54 C/2 and falls in Seismic Zone-II.
- ii. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.
- iii. Details of previous Environmental Clearance (EC):
 - a) The Project Proponent obtained Environmental Clearance (EC) vide EC Lr No. J-11015/14/2003-IA.II(M) dated 26.12.2005 for production capacity of 1.5 MTPA involving mine lease area of 1516.88 ha under the provisions of EIA Notification, 1994.
- iv. Details of Terms of Reference (ToR):

Date of application	Proposal No/ File No	Consideration by EAC	Details of ToR	Date of accord
04.10.2018	IA/RJ/MIN/ 275163/2022 J-11015/167/ 2018-IA.II (M)	38 th EAC (15.11.2018), 20 th EAC meeting (21.08.2020), 26 th EAC (13.01.2021) and 52 nd EAC (14.06.2022)	Terms of Reference under the provision of Notification S.O 1530(E) dated 06.04.2018 for Lakheri Limestone Mine of M/s ACC Limited (Area: 1516.88 Ha) with Limestone Production Capacity of 1.5 Million TPA and waste/topsoil 11.25 Lakhs cu.m per annum with existing wobbler & screening plant of 400 TPH at Villages Gendoli Kala, GendoliKhurdh, Pholai, Gutha, Mahuwa, Dangaheri, Budel, Kankra, Chamavali, Uttarana, Lakheri, Sakhoda, Nayagaon&Papadi, Tehsil: Indergarh, District: Bundi, Rajasthan.	28.06.2022

v. Details of Mine Lease:

- a) The mining lease was originally granted by the State Government in year 1913 and lease deed was executed on 01.12.1913 for a period of 30 years.
- b) First Renewal of mine lease was granted on 28.07.1943 for a period of 30 years w.e.f. 01.08.1943 for mining of Limestone.
- c) Second renewal of mine lease was for a period 20 years w.e.f. 01.08.1973 and after 01.08.1993, the lease was under deemed renewal upto 31.07.2013.
- d) As per Section 8A (5) of MMDR (Amendment) 2015, Lease period of Mining leases has been extended upto 31.03.2030 vide Department of Mines & Geology Lr no ME/Kota/C.C/Major/4/72/349 dated 18.02.2015.

vi. Land Use/Land Cover of the Mine Lease Area:

Private land	645.87 Ha
Government land	461.13 Ha
Forest Land	409.88 Ha
Total Mining lease area (MLA), Ha	1516.88 Ha
Private land for crusher, workshop & other infrastructure outside the MLA	No infrastructure is proposed outside the ML area

vii. Mining Plan Details: -

Modified Mining Plan including Progressive Mine Closure Plan approved by Indian Bureau of Mines	Letter No.	584 (4)(3)(1886)/2021-RCM-Ajmer	
	Date	28.12.2021	
	Mineral & (Major/Minor)	Limestone (Major Mineral)	
	Mine Lease Area, Ha	1516.88	
	Validity	2022-23 to 2024-2025	
Mining Parameters	Quantitative Description		
Method of Mining	Fully Mechanized Opencast Mining Method		
Drilling/Blasting	Drilling Parameter		
	S. No.	Particular	Details
	1	Height of the bench	9.0 m
	2	Sub grade drilling	0.5 m
	3	Length of stemming column	2.5 m
	4	Length of ANFO Column	3.5 m
	5	Spacing	4.0 m
	6	Burden	3.0 m
	7	Type of Booster	Primer
	8	Type of drill holes	Vertical Holes with 115 mm diameter each
Blasting Parameter			

	S. No.	Particular	Details
	1	Spacing	4.0 m
	2	Burden	3.0 m
		Depth of Hole	9.5 m
	3	Charge per delay	40 –45 kg
	4	Powder Factor (T/kg)	8 tonnes per kg
Geological Reserves	24.60 Million Tonnes (As on 01.09.2021)		
Mineable Reserves	21.80 Million Tonnes (As on 01.09.2021)		
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Limestone 1.50 Million TPA and OB Waste 1.96 Million TPA (Total Excavation: 3.46 Million TPA)		
Life of mine	~15 years (based on mineral reserves as on 01.09.2021)		
Mine Bench Height & Bench Width	Bench Height – 6 - 9 m Bench Width–15 - 20 m (working width)		
No. of Mine Benches	3		
Existing Depth, m bgl	15 m bgl		
Ultimate Depth of Mining, m bgl	20 m bgl		
Ground Water Table, m bgl	Post monsoon: 5.8- 6.5 m bgl Pre monsoon: 6.83 - 7.53 m bgl		
Details of ground water intersection	The groundwater table has already been intersected and permission for the same has already been obtained from CGWA vide NOC no CGWA/NOC/MIN/ORIG/2021/13631 dated 03.11.2021 (Valid upto 02.11.2023)		
Individual bench slope	80°		
Overall pit slope	45°		
Details of existing/ proposed Crusher	The limestone raised is being/will be transported to Wobbler along with screen having 400 TPH capacities within lease area / crusher. Wobbled & screened material/raised limestone is transported to the crusher (situated in cement plant) by Rail/Road from which the crusher limestone is being/will be transported to cement plant by conveyor belt.		
Mineral Beneficiation			
RoM output size	500 mm to 800 mm size		
Transportation details including capacity of dumper/tipper, mode of transport and distance	The limestone raised is being/will be transported to Wobbler along with screen having 400 TPH capacities within lease area / crusher. Wobbled & screened material/raised limestone is transported to the crusher (situated in cement plant) by Rail/Road from which the crusher limestone is being/will be transported to cement plant by conveyor belt.		

Generation of Topsoil/OB & its Management during plan period & conceptual period	Particulars	Top Soil generation and management	OB generation and management
	<u>Plan period:</u>	Total 4.76 million tonnes of Over burden waste will be generated in which partial quantity of OB waste generated will be stored in 10 proposed dumps covering an area of 11.33 ha and rest will be used to backfill the pit - Lower P3.	
	<u>Conceptual stage:</u>	During the conceptual / lease period 178.50 lacs m ³ of OB waste will be generated. At conceptual period, 60 Ha will be backfilled, out of which 29.26 Ha has already been reclaimed. Remaining 30.74 Ha will be backfilled with 35.7 lacs m ³ of OB waste and rest will be stacked as dumps which covers an area of 85 ha.	
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	Nil		

viii. Water requirement:

Total water requirement	94.0 KLD	Dust Suppression	40.0 KLD
		HEMM Washing, Workshops	10.0 KLD
		Greenbelt development	30.0 KLD
		Domestic Use	14.0 KLD
Source	Mine sump and Ground water		
Permission for withdrawal/ intersection along with details of grant and its validity	No Objection Certificate for Groundwater abstraction vide NOC No. CGWA/NOC/MIN/ORIG/2021/13631 dated 3/11/2021 for abstraction of fresh water of 14.0 m ³ /day and dewatering of 350.0 m ³ /day and is valid upto 02.11.2023.		

ix. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest

Particulars	Particular's Name	Directions
Nearest village	Within Mining Lease area: Gendoli Kala, Gendoli Khurdh, Gutha, Lakheri & Sakhoda	
	Part habitation within ML Area: Chamavali, Uttarana, Kankra & Dangaheri	

	Adjacent or within 500 m from ML: Pholai, Mahuwa, Budel, Nayagaon & Papadi)	
Nearest Town	Kota	~42 km, SSW
Nearest State/National Highway	SH- 01 SH- 29 Delhi -Mumbai Expressway	Passing through ML area Passing through ML area Passing through ML area
Interstate Boundary	None	None
Railway Station/Railway line	Lakheri Railway Station	~4.5 km, East
	Railway line (Length 0.40 km)	Passing through ML Area
Water Bodies	Mej River	Passing through ML area in ENE direction
	Sandal Nallah	Passing within mining lease area
	Motipura Bandh Canal	~2.5 km, WSW
	Chambal Main left canal	~3.0 km, East
	Taljuni Nadi	~3.5 km, WSW
	Chambal River	~4.0 km, ENE
	Chhaonika Talav	~5.5 km, West
	Kural Nala	~6.0 km, SW
	Machhli Nala	~8.5 km, NW
	Bikhai Nala	~8.5 km, SSW
Forest	Indergarh PF	Adjacent, North
	Protected Forest	Adjacent, NNW
	Reserved Forest	Adjacent, SW
	Protected Forest	Adjacent to ML area
	Balwan PF	Adjacent, ENE
	Kapren PF	Adjacent, NE
	Protected Forest	~1.0 km, ENE
	Protected Forest	~1.5 km, ENE
	Protected Forest	~3.0 km, East
	Protected Forest	~3.5 km, East
	Protected Forest	~3.5 km, WSW
	Naenwa PF	~3.5 km, North
	Protected Forest	~4.0 km, ESE
	Protected Forest	~4.5 km, ESE
	Mohanpura PF	~6.5 km, NE
Protected Forest	~8.0 km, WSW	

x. Presence of Environmentally Sensitive areas in the study area:

Forest Land / Protected Area / Environmental Sensitivity Zone	Yes/ No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
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Forest Land within the mine lease area and (if yes) status of Forest Clearance	Yes	<p>a) Out of 1516.88 ha area, 1107 ha is non-forest land and 409.88 ha is a Forest land. Out of 409.88 ha forest land, diversion of 108 ha has been granted by MoEFCC Vide letter No 8-2/97-FC dated 03.04.1998</p> <p>b) Diversion of 100 ha has been granted by MoEFCC vide letter no 8-26/2003-FC dated 13.11.2006</p> <p>c) Renewal of 208 ha forest land by MoEFCC (FC Division) Vide letter no 8-26/2003-FC dated 18.12.2013</p> <p>d) For the balance 201.88 ha area, application has been submitted for diversion on 18.07.2012</p> <p>e) NPV have also paid for the total forest land of 409.88 Ha and General approval has been obtained for complete 409.88 ha of forest land on 27.12.2017</p>
National Park	No	<p>a) There are 2 nos of Sanctuaries, one is “Ramgarh Sanctuary” which is 2.65 Km away and another is “National Ghariyal sanctuary” which is 2.5 Km away. ESZ, permission has been granted by MoEF&CC in its 31st standing committee on 12th/13th August 2014</p> <p>b) Forest area of 409.88 ha falls under buffer zone of RTR (Ranthambore Tiger Reserve) for which NBWL approved de-notification in its 45th standing committee meeting on 04.09.2017</p> <p>c) Government of Rajasthan has issued de-notification for denotification of forest area of 436.35 ha including our 409.88 ha area land from buffer zone of Ranthambore Tiger Reserve (RTR) vide letter no P1 (63) Van/2017 dated 26.05.2022</p>
Wildlife Sanctuary	Yes	
Elephant/Tiger Reserve	Yes	
Eco-Sensitive Zone (ESZ) /Eco-Sensitive Area (ESA)	Yes	
Coastal Regulation Zone (CRZ)	No	--
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	Yes	<p>According to (IWPA) Indian Wildlife Protection Act, 1972, five Schedule- I fauna found in the study area. Out of these 3 mammals’ species i.e. Gazella gazelle (Chinkara), Pantheratigris (Tiger), Ursusamericanus (Bear) and 1 reptiles’ species i.e. Varanusbengalensis (Indian monitor lizard), and 1 Avi-faunal species i.e. Pavocristatus (Peafowl) were recorded in the study area during field survey. Authenticated list of flora and fauna has been received from DCF vide letter no F () Survey/DCF/R.V.T.R/1353 dated 04.11.2022.</p>

Wildlife Conservation Plan	Yes	Conservation Plan of an amount of Rs 7.84 Crore has been prepared and submitted to CWLW for approval. Letter received from CWLW vide letter no F 11 (450) Vikas /C.W.L.W / 2022-23/109 dated 10.02.2023
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xi. Green belt/Plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	Details are given as per below:				
Budget for green plant & plantation till the end of life of mine.	S. No.	Particular	Status of Greenbelt of Total Lease area	Greenbelt in only possession land	Remarks
Budget for nursery	1.	Length of lease Periphery	82.6 km	67.8 km	Details of land: <u>Non forest Land- 1107 ha, Diverted Forest Land-208 Ha, Non diverted forest Land- 201.88 ha, At present, we can develop green belt, only peripheral length of non-forest and diverted forest land.</u>
Details of existing plantation and its survival rate	2.	Area of greenbelt	61.95 ha	50.85 Ha	
	3.	No of Plants planted	35300	35300	
	4.	Survival Rate	80	80	
	5.	Greenbelt done as on date	11.5	11.5	
	6.	Greenbelt to be done with timeline	31.03.2026	31.03.2026	
No. of tree cuts in the mine lease area and compensatory afforestation	None				
Particulars for Green belt/plantation	Area covered (in Ha)				
7.5 m barrier & non-mineralized zone	At present 11.5 ha area has been covered with greenbelt within 7.5 m safety zone and an area of 39.35 ha will be developed under greenbelt till life of mine				
50 m safety zone of nallah, roads, electric lines	i. At present 0.30 ha area has been covered with plantation on safety zone of nalla and remaining 2.60 ha area will be covered till life of mine				

	ii. At present 2.5 ha area has been covered with plantation on safety zone of road/highway and remaining 2.75 ha area will be covered till life of mine.
500 m safety zones of nearest habitation villages	At present 1.2 ha area has been covered with plantation on safety zone of nalla and remaining 1.22 ha area will be covered till life of mine

xii. Details of Baseline data:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)			
Period of baseline data collection	October to December 2022		
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Post monsoon Season		
Predominant Wind direction (From)	West direction		
Ambient Air Quality (no. of locations) and results	No. of Locations	Parameters	Results
	10	PM ₁₀	44.7 to 90.8 µg/m ³
		PM _{2.5}	23.8 to 52.7 µg/m ³
		SO ₂	5.9 to 12.1 µg/m ³
		NO ₂	12.1 to 22.8 µg/m ³
Noise level (no. of locations) and results	No. of Locations	Parameters	Results
	08	During Day Time [Leq dB(A)]	51.2 to 65.1
		During Night Time [Leq dB(A)]	41.5 to 49.3
Water Quality (no. of locations) and results	Ground water quality		
	No. of Locations	Parameters	Results
	10	pH	7.18 to 7.72
		TDS (mg/l)	544 to 3268 mg/l
		Fluoride (mg/l)	0.12 to 0.98 mg/l
		Sulphate (mg/l)	34.6 to 198.5 mg/l
		Calcium (mg/l)	77.2 to 298.9 mg/l
		Magnesium	20.4 to 120.3 mg/l
	Surface Water Quality		
	No. of Locations	Parameters	Results
	10	pH	6.98 to 7.34
		TDS (mg/l)	84 to 398 mg/l
		DO (mg/l)	6.60 to 7.40 mg/l
BOD (mg/l)		1.60 to 7.10 mg/l	
Magnesium		4.80 to 21.60 mg/l	

Soil Quality (no. of locations) and results	No. of Locations		Parameters		Results		
	09		pH		6.28 to 8.13		
			Texture		Clay Loam		
			Organic Matter (%)		0.98 to 1.18 %		
Hydro geological study and results	Ground Water Level (Phreatic Surface) - 13 Locations						
	Monitoring Location	Range of Water Table Pre-monsoon Season (in m below ground level)			Range of Water Table Post-Monsoon Season (in m below ground level)		
		From (Pre-monsoon)	To (Pre-monsoon)	From (Post-monsoon)	To (Post-monsoon)		
	Buffer Zone	6.5	6.5	5.8	5.8		
Core Zone	7.53	7.53	6.83	6.83			
Traffic study (no. of locations) and results	No public road is being/will be used for transportation of Limestone. Therefore, traffic study is not required.						

xiii. Details of Public Consultation:

- a) As per Specific ToR point no: 1 “The Public Hearing was already conducted on 07.04.2003 for the same scope and at present there is no change in scope. Therefore, as per Ministry’s O.M. dated 16.02.2021, the project proponent shall carry out public consultation instead of public hearing and shall address the concerns of the public in the EIA/EMP report.
- b) Public consultation for this project done on 29.03.2023.
- c) Issues raised during public consultation were about Infra Development, Education, Drinking Water facilities, Skill Development, Employment based training, Healthcare facilities, Plantation in nearby areas, etc.
- d) The Project Proponent earmarked a budget of Rs 3.01 Crore (Capital) to address the concerns raised during public consultation over a period of 3 years.

xiv. Details of CTE/CTO, Certified Compliance Report, Certified Production Details from the inception of the mine:

Particulars	Details of Letter along with date of grant and validity
Consent to Establish (CTE)	CTE issued by the Rajasthan State Pollution Control Boardvide letter no F.12 (6-14) RPCB/Gr.I/6657 dated 30.12.2005for Limestone Production Capacity of 1.5 MTPA
Consent to Operate (CTO)	CTO issued by the Rajasthan State Pollution Control Boardvide File No: F (Mines) / Bundi (Bundi) 1 (1) 2009-2010 / 4954-4958 dated 19.12.2022 for Limestone

	Production Capacity of 1.5 MTPA under Water Act and Air Act for the period upto 31.12.2023.																																																																																																																												
Certified Compliance Report and Inspection date	Certification of compliance report of EC dated 26.12.2005 has been granted by IRO, Jaipur vide letter no IV/ENV/R/MINE-288/394/296 dated 29 th August 2022. The project was Inspected/ Monitored on 25/07/2022.																																																																																																																												
Certified Production Details from the inception of the mine (in tabular form against the EC capacity)	<p>Year-wise production details since inception of mine has been authenticated by Asst. Mining Engineer vide letters dated 13.11.2018, 08.06.2022 and 06.04.2023 for the period 1987-88 to 2022-23.</p> <table border="1"> <thead> <tr> <th>S. No</th> <th>Year</th> <th>As per EC (MTPA)</th> <th>Actual production (Tonnes)</th> </tr> </thead> <tbody> <tr><td>1.</td><td>1993 – 1994</td><td>-</td><td>0.342</td></tr> <tr><td>2.</td><td>1994 - 1995</td><td>-</td><td>0.223</td></tr> <tr><td>3.</td><td>1995 - 1996</td><td>-</td><td>0.210</td></tr> <tr><td>4.</td><td>1996 - 1997</td><td>-</td><td>0.191</td></tr> <tr><td>5.</td><td>1997 - 1998</td><td>-</td><td>0.234</td></tr> <tr><td>6.</td><td>1998 - 1999</td><td>-</td><td>0.269</td></tr> <tr><td>7.</td><td>1999 - 2000</td><td>-</td><td>0.455</td></tr> <tr><td>8.</td><td>2000 - 2001</td><td>-</td><td>0.562</td></tr> <tr><td>9.</td><td>2001 - 2002</td><td>-</td><td>0.565</td></tr> <tr><td>10.</td><td>2002 - 2003</td><td>-</td><td>0.493</td></tr> <tr><td>11.</td><td>2003 - 2004</td><td>-</td><td>0.623</td></tr> <tr><td>12.</td><td>2004 - 2005</td><td>-</td><td>0.601</td></tr> <tr><td>13.</td><td>2005 - 2006</td><td>1.5</td><td>0.620</td></tr> <tr><td>14.</td><td>2006 - 2007</td><td>1.5</td><td>0.568</td></tr> <tr><td>15.</td><td>2007 - 2008</td><td>1.5</td><td>0.434</td></tr> <tr><td>16.</td><td>2008 - 2009</td><td>1.5</td><td>0.721</td></tr> <tr><td>17.</td><td>2009 - 2010</td><td>1.5</td><td>0.779</td></tr> <tr><td>18.</td><td>2010 - 2011</td><td>1.5</td><td>0.791</td></tr> <tr><td>19.</td><td>2011 - 2012</td><td>1.5</td><td>0.803</td></tr> <tr><td>20.</td><td>2012 - 2013</td><td>1.5</td><td>0.905</td></tr> <tr><td>21.</td><td>2013 - 2014</td><td>1.5</td><td>0.880</td></tr> <tr><td>22.</td><td>2014 - 2015</td><td>1.5</td><td>0.614</td></tr> <tr><td>23.</td><td>2015 - 2016</td><td>1.5</td><td>0.585</td></tr> <tr><td>24.</td><td>2016 - 2017</td><td>1.5</td><td>0.792</td></tr> <tr><td>25.</td><td>2017 - 2018</td><td>1.5</td><td>0.808</td></tr> <tr><td>26.</td><td>2018 - 2019</td><td>1.5</td><td>0.239</td></tr> <tr><td>27.</td><td>2019 - 2020</td><td>1.5</td><td>1.159</td></tr> <tr><td>28.</td><td>2020 - 2021</td><td>1.5</td><td>1.042</td></tr> <tr><td>29.</td><td>2021 - 2022</td><td>1.5</td><td>1.071</td></tr> <tr><td>30.</td><td>2022 – 2023</td><td>1.5</td><td>0.995</td></tr> </tbody> </table>	S. No	Year	As per EC (MTPA)	Actual production (Tonnes)	1.	1993 – 1994	-	0.342	2.	1994 - 1995	-	0.223	3.	1995 - 1996	-	0.210	4.	1996 - 1997	-	0.191	5.	1997 - 1998	-	0.234	6.	1998 - 1999	-	0.269	7.	1999 - 2000	-	0.455	8.	2000 - 2001	-	0.562	9.	2001 - 2002	-	0.565	10.	2002 - 2003	-	0.493	11.	2003 - 2004	-	0.623	12.	2004 - 2005	-	0.601	13.	2005 - 2006	1.5	0.620	14.	2006 - 2007	1.5	0.568	15.	2007 - 2008	1.5	0.434	16.	2008 - 2009	1.5	0.721	17.	2009 - 2010	1.5	0.779	18.	2010 - 2011	1.5	0.791	19.	2011 - 2012	1.5	0.803	20.	2012 - 2013	1.5	0.905	21.	2013 - 2014	1.5	0.880	22.	2014 - 2015	1.5	0.614	23.	2015 - 2016	1.5	0.585	24.	2016 - 2017	1.5	0.792	25.	2017 - 2018	1.5	0.808	26.	2018 - 2019	1.5	0.239	27.	2019 - 2020	1.5	1.159	28.	2020 - 2021	1.5	1.042	29.	2021 - 2022	1.5	1.071	30.	2022 – 2023	1.5	0.995
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11.	2003 - 2004	-	0.623																																																																																																																										
12.	2004 - 2005	-	0.601																																																																																																																										
13.	2005 - 2006	1.5	0.620																																																																																																																										
14.	2006 - 2007	1.5	0.568																																																																																																																										
15.	2007 - 2008	1.5	0.434																																																																																																																										
16.	2008 - 2009	1.5	0.721																																																																																																																										
17.	2009 - 2010	1.5	0.779																																																																																																																										
18.	2010 - 2011	1.5	0.791																																																																																																																										
19.	2011 - 2012	1.5	0.803																																																																																																																										
20.	2012 - 2013	1.5	0.905																																																																																																																										
21.	2013 - 2014	1.5	0.880																																																																																																																										
22.	2014 - 2015	1.5	0.614																																																																																																																										
23.	2015 - 2016	1.5	0.585																																																																																																																										
24.	2016 - 2017	1.5	0.792																																																																																																																										
25.	2017 - 2018	1.5	0.808																																																																																																																										
26.	2018 - 2019	1.5	0.239																																																																																																																										
27.	2019 - 2020	1.5	1.159																																																																																																																										
28.	2020 - 2021	1.5	1.042																																																																																																																										
29.	2021 - 2022	1.5	1.071																																																																																																																										
30.	2022 – 2023	1.5	0.995																																																																																																																										

xv. Rehabilitation & Resettlement (R&R):

R & R details	Total mine lease area is 1516.88 ha, out of which 409.88 ha is a forest land, 461.13 ha is a Govt land and 645.87 ha is a Private land. Out of total private land of 645.87 ha, 354.02 ha land has already been owned by ACC. Remaining private land fall in non-mineralized area hence future acquisition is not required.
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xvi. Court case details:

Court Case, No and its present status	<p>The Project Proponent vide letter dated 24.04.2023 submitted an undertaking stating that there is no litigation pending against the project and/or any direction/ order passed by any court of law against the project and that for any such litigation whatsoever, the sole responsibilities will be borne by the company.</p> <p>However, a complaint has been lodged in Hon'ble NGT Bhopal on 11.02.2023. The Hon'ble NGT has formed a joint committee consisting of (i) Collector, Bundi, Rajasthan, (ii) Representative of Chief Wild Life Warden, (iii) Representative of RPCB vide order dated 13.03.2023. The Committee has visited the site on 21.04.2023 to submit the factual and action taken report.</p>
Undertaking by Project Proponent w.r.t court case	

xvii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent submitted the Affidavit in a non-judicial stamp paper of Rs 100 bearing no: AH525507 dated 12.11.2018 stating that they commit to comply if applicable with the order of Hon'ble Supreme Court dated 2 nd August 2017 in w.r.t. Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors.
Undertaking by Project Proponent in EIA/EMP report	The Project Proponent has submitted an undertaking vide letter dated 18.04.2023 stating that the conditions laid down in ToR issued by MoEF&CC vide ToR Letter dated 28.06.2022 in accordance to the EIA Notification, 2006 and amended as on date have been complied with and the data submitted and the information presented in this report are factually correct.
Undertaking by Consultant in EIA/EMP report	The Consultant submitted an undertaking vide letter dated 14.04.2023 to the effect that the conditions laid down in Terms of Reference issued by MoEF&CC, New Delhi vide letter no. J-11015/167/2018-IA.II(M) dated 28.06.2022 have been complied as per data/details provided by Project Proponent & as per Review and Modification in Mining Plan approved by IBM and the data submitted are factually correct.

Plagiarism Certificate	The Head of the Accredited Consultant Organization/ Authorized person certified that this EIA Report has been evaluated by using online software viz. Plagiarism Checker X on 14.04.2023. The report produced has been analyzed by the system and based on it and certify that the EIA Report produce in accordance with good scientific practice.
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xviii. Details of the Environmental Management Plan (EMP):

Sl. No.	Activities	Proposed budget (In Lakhs)	
		Capital	Recurring
A.	Mitigative Measures		
1.	Water tankers for sprinkling on haul roads and mining areas/activities	50	10
2.	Fixed Water Sprinkler on Haul Road	50	10
3.	Greenbelt on remaining 39.35 ha with 98250 trees till 2030	197	5
4.	Plantation over an area of 63.72 ha (158175 trees) till 2030	-	46
5.	Drip irrigation facility for plantation	5.0	0.5
6.	Protection for Plantation (Fencing around area)	20	0.30
7.	Rain water harvesting structure near Mines office	5	0.3
8.	Provision of Garland Drains around OB dumps: (L*W*D = 1200 m x 3 m x 1.5 m)	20	1.0
9.	Construction of Retaining Wall around OB dumps (L*W*D = 1200 m x 0.45 m x 1.5 m)till 2030	100	5.0
10.	Construction of check dams (5 nos) around mine pit and OB dump to prevent surface run off till 2030	10	1.0
11.	Controlled blasting for minimizing ground vibration, fly rock, air pressure/ noise, etc. by Using Nonel and Exel	-	10
12.	10 nos. of fog canon/mist sprayer of at least 40 m throw shall be installed at various locations in the mine lease area.	30.0	2.0
13.	Vaccum suction hoods and dry fogging system in Wobbler	30.0	0.5
14.	Providing Ear muffs/plugs to workers working in high noise area	-	1.0
	Sub Total	517	92.6
B.	Monitoring		
1.	Installation of continuous Ambient Air Quality Monitoring Station (3 nos)	150	15
2.	Display Board at main gate for display of Ambient, Air, Noise and Hazardous waste monitoring data.	5.00	0.50
3.	Five Ambient Air Quality Monitoring Station at Village Lakheri, Utrana, GandoliKhurd, Dangaheri and Chamavali	5.00	0.50
4.	Air monitoring Equipment for PM10 & PM2.5	1.70	1.50
5.	Work Place Noise Level Monitoring (4 no. of locations & quarterly frequency)	-	0.10

6.	Installation of 03 pie-zometer along the periphery in the premises	5.00	0.50
7.	Monitoring of River and nallah (Flow and quality-inlet & outlet).	-	1.50
	Sub Total	166.7	19.6
C.	Wildlife conservation Plan for 5 schedule I species	784	-
	Total	1467.7	112.2

xix. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Total Cost for EMP (Capital Cost of EMP + Capital cost of Public hearing)	Capital Cost: Rs. 17.69 Crores (Capital cost of EMP: Rs. 14.68 Crore + Capital cost for public hearing: Rs. 3.01 Crore)
Project Cost	Rs. 77 Crores
Employment	91 persons

3. Observation and Recommendation of the EAC: -

The Project Proponent informed the EAC, that initially Environmental Clearance (EC) was obtained vide EC dated 26.12.2005 for production capacity of 1.5 MTPA involving mine lease area of 1516.88 ha under the provisions of EIA Notification, 1994. The instant proposal is for revalidation of EC under MoEF&CC Notification S.O 1530(E) dated 6th April, 2018. There is no change in the production capacity, mine lease area and no additional land acquisition and accordingly Terms of Reference was obtained on 28.06.2022 with exemption of public hearing as per Ministry's OM dated 16.02.2021.

Then, the Project Proponent/Consultant presented the KML file and explained the site features in the vicinity of the mine lease area and in the study area of 10 km radius. The EAC asked about the distance of the Ramgarh Sanctuary from the mine lease area. The Project Proponent informed the EAC that the Ramgarh Sanctuary is 2.65 km away from the mine lease area. Forest area of 409.88 ha within lease area falls under the buffer zone of RTR (Ranthambore Tiger Reserve). The NBWL approved de-notification of the aforesaid forest area in its 45th standing committee meeting held on 04.09.2017. Government of Rajasthan has issued de-notification of forest area of 436.35 ha including the area of 409.88 ha from buffer zone of Ranthambore Tiger Reserve (RTR) vide letter dated 26.05.2022. The EAC asked about the railway line and road passing within the mine lease area. The Project Proponent informed the EAC that one railway line (Length 0.40 km) passes through the mine lease area from North to South direction. A safety zone of 500m is left as no mining zone. SH-29 connecting the town Bundi and town Lakheri passes through the mine lease area at some places. SH-1 (~0.40 km) is passing through the mine lease area connecting the Lakheri town in South and merging into the SH-29 in North direction. The Delhi -Mumbai Expressway is also passing through the mine lease area (Length 0.50 km) from North to South. Mej River (~0.5 km in length) passes through

the NE part of lease area and is 2 km away from the active mining area. Sandal nala (~0.5 km in length) crossing the mine lease from North to South. Ultimate pit limit will be 50 m away from Sandal nala. The EAC noted the river Mez is in the close proximity of the mine lease area. The EAC was of the view that the River Mez is the lifeline of the sanctuary and flows across the Ramgarh Sanctuary. The EAC asked whether any school located within the mine lease area. The Project Proponent informed the EAC that a school is located within the mine lease area and is 500 m away from the crusher.

The EAC asked about the status of the Wildlife Clearance. The Project Proponent informed the EAC that the forest area of 409.88 ha falls under buffer zone of RTR (Ranthambore Tiger Reserve) for which NBWL approved de-notification in its 45th standing committee meeting on 04.09.2017. The EAC observed that the Draft Notification of Ramgarh Wildlife Sanctuary was notified vide S.O. 4777(E) dated 30.12.2020 and the extent of Eco-Sensitive Zone varies from 0.025 kilometres to 0.40 kilometres around the Ramgarh Wildlife Sanctuary. The EAC also observed that the Ramgarh Wildlife Sanctuary is now a part of core area of recently notified Ramgarh Visdhari Tiger Reserve (52nd). The Ramgarh Visdhari TR with total area of 1501.88 Square km (core 481.9 square km and buffer 1019.98 square km) is an important area for meta-population management of tigers in this landscape and provides connectivity with Ranthambore and Mukundra Hill Tiger Reserves". The EAC asked the Project Proponent whether any comments from the NTCA have been sought in this regard. The Project Proponent informed the EAC that during the 45th meeting of the Standing Committee of National Board for Wildlife held on 04.09.2017, the NTCA has recommended the proposal and the Project Proponent has agreed to provide an amount of Rs 5.0 Cr into the corpus of Ranthambore Tiger Conservation Foundation for carrying out the conservation activities.

The Project Proponent has shown the past production details from the 1993-94 to 2022-23 and informed the EAC that there is no excess production done against the granted EC capacity of 1.5 MTPA. The EAC noted that as per the certified past production details, the Project Proponent has missed out the year 2018-19. Public consultation for this project was carried out on 29.03.2023. A budget of Rs 3.01 Crore (Capital) has been earmarked to address the concerns raised during public consultation over a period of 3 years. Site Inspection of the project was carried out by Integrated Regional Office, Jaipur on 25.07.2022 and Certified Compliance Report was issued by 29.08.2022. The EAC asked the Project Proponent to show the point wise compliance of EC conditions and the Project Proponent has shown the point wise compliance of EC conditions before the EAC. The EAC asked about the status of forest clearance for remaining forest land of 201.88 ha. The Project Proponent informed the EAC that for the balance area of 201.88 ha for diversion of forest land application was submitted on 18.07.2012. NPV has been paid for the total forest land of 409.88 ha and General approval has been obtained for the entire forest land of 409.88 ha on 27.12.2017.

The EAC asked the Project Proponent whether NOC has been obtained from the Railway Dept or not. The Project Proponent informed the EAC that NOC has not been obtained from the Railways Dept. The EAC opined that the Project Proponent needs to submit the real time data monitored for ground vibration for each blast for the past 6 months in line with the DGMS permission and the measures to mitigate impact of the fly rock. The EAC also opined that the Project Proponent needs to submit the current status from the State Govt. in reference to the 45th meeting of the Standing Committee of National Board for Wildlife held on 04.09.2017 and Ministry's letter dated 12.09.2017. The EAC also noted that even after identification, mine lease area is adjacent to the buffer area of RTR. Based on the above discussions held, the EAC **deferred** the proposal and the EAC was of the view that the proposal may be considered only after the submission of the following information: -

- i. The Project Proponent needs to submit the current status from the State Govt. in reference to the 45th meeting of the Standing Committee of National Board for Wildlife held on 04.09.2017 and Ministry's letter dated 12.09.2017.
- ii. Ministry may also seek comments from NTCA.
- iii. The EAC noted the river Mez is located to the close proximity of the mine lease area. The Project Proponent needs to explore the likelihood of river water entering into the mine pit below the RL of the HFL and the measures that are required to be taken for prevention of seepage and in the event of seepage to drain out the water through settling tank.
- iv. The Project Proponent needs to submit the methodology of mining and year wise sequence of mining w.r.t railway line and also the measures to be taken to mitigate the impact of mining activity. The details of the train passing, frequency of the trains, train timings, blasting time and safety distances shall be provided.
- v. The Project Proponent needs to submit the real time data monitored for ground vibration for each blast for the past 6 months in line with the DGMS permission and the measures to mitigate impact of the fly rock.
- vi. The Project Proponent needs to submit the action plan for shifting the School within the mine lease area along with timeline and cost.
- vii. The Project Proponent needs to submit the action plan to install Continuous Ambient Air Quality Monitoring Station with timeline.

- viii. The Project Proponent needs to submit the current status of diversion of forest clearance for remaining forest land of 201.88 ha.
- ix. The Project Proponent needs to submit the certified past production detail for the year 2018-19.
- x. The Project Proponent needs to submit the complete details and background regarding the complaint lodged in Hon'ble NGT Bhopal on 11.02.2023 and its present status with supporting documents.
- xi. The Project Proponent needs to submit the proof of payment Rs 5.0 Cr made into the corpus of Ranthambore Tiger Conservation Foundation for carrying out the conservation activities.

1.2 Bicholim Mineral Block- Block 1 (Auction Block) of M/s Vedanta Limited for mining of Iron Ore with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA(Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located in Bicholim, Bordem, Lamgao, Mulgoa, Mayem & Sirigao Villages of Bicholim Taluka of North Goa District, Goa - [F.No: IA-J-11015/3/2023-IA-II(NCM), Proposal No: IA/GA/MIN/422323/2023, Consultant: M/s Mineral Engineering Services] -Terms of Reference (ToR)

The instant proposal is for mining of Iron Ore in Bicholim Mineral Block – Block 1 (Auction Block) of M/s Vedanta Limited with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA (Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located in Bicholim, Bordem, Lamgao, Mulgoa, Mayem & Sirigao Villages of Bicholim Taluka of North Goa District, Goa.

2. The details of the project as ascertained from the document submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

- i. The mine lease area is located between Latitude: 15°34'20.518"N to 15°36'54.018"N and Longitude: 73°54'4.754"E to 73°57'09.51"E. The mine lease area falls under the Survey of India Toposheet No: D43B14 and falls in Seismic Zone-II.
- ii. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.
- iii. Details of Mine Lease:

- a) The Project Proponent has submitted the Letter of Intent (LoI) granted by the Government of Goa vide Lr No: DMG/25/Auction Cell/LOI-function/2023/2801 dated 13.01.2023 for grant of mining lease for Block I - Bicholim Mineral Block for Iron Ore in Bicholim, Bordem, Lamgao, Mulgao Mayem & Sirigao villages, Bicholim Taluka, North Goa District over an area of 478.5206 Hectare for a period of 50 (fifty) years in pursuant to Rule 10(2) of the Auction Rules. This letter of intent is valid for a period of 3 (three) years from the date of its issuance.

iv. Land Use/Land Cover of the Mine Lease Area:

Private land	421.1153 Ha
Government land	57.4053 Ha
Total Mining lease area (MLA)	478.5206 Ha
Private land for crusher, workshop & other infrastructure outside the MLA	Not Applicable

v. Details of Mining Plan:

- a) The Project Proponent has submitted that the Mining Plan is submitted to Indian Bureau of Mines (IBM), Goa for approval and is under process.
- b) The method of mining will be opencast mechanized without drilling and blasting. Total Mineral Reserves & Resources estimated as 84.743 million tonnes. Life of the mine will be 30 years @ 3.0 MTPA.
- c) The proposed bench height and width will be 7m and 10-12 m respectively. The individual bench slope will be 70° and overall pit slope will be 27°.
- d) The ore will be transported from Mine to Sarmanas jetty through dedicated road with only 0.9km stretch of public road in use.

vi. Water requirement:

Total water requirement	664 KLD	Pit Water	628 KLD
		Ground water	36 KLD
Source	Water from Mine Pit will be used for dust suppression, Vehicle washing and Green belt. Water for domestic requirement will be met from bore well.		
Permission	The Bore wells are registered with Goa State Water Resource department. Application for using mine pit water will be submitted.		

vii. Nearest village / town/ highway/railway station / water bodies/monument

Particulars	Particular's Name	Distance & Directions
Village	Lamgoa	Within the lease area
Town	Bicholim Town	0.5 km, East
Road	State Highway SH-1	0.65 km, East
Railway Station	Tivim Railwaystation	10.5 km, North

Water Bodies	Asnora River Mandovi River	Touching lease boundary at one of the points 2.3 km, SW
School	Mulgao Govt. Primary School	Within the lease area
Worship places	Namuzgah/Idgah Shri Lairae Temple	Within the lease area 0.86 km

viii. Presence of Environmentally Sensitive areas in the study area:

Forest Land/Protected Area/Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter/Remarks
Forest Land	No	No Forest land is involved in the mine lease area. The following Reserve Forests are located within 10 km radius of the mine lease area such as Kharapal RF -6.7 Km Ambadgaon RF - 7.4 Km
National park	No	The Project Proponent has submitted the letter from the Office of the Dy. Conservator of Forests vide Lr No: DCF(WP)/Tech/Digi/Vol-I/75/2022-23/968 dated 23.01.2023 stating that the proposed Bicholim Mineral Block-I is not situated within 10 km radius from the boundary of any the protected area in the State of Goa. PP also submitted the authenticated map dated 24.01.2023 showing the distance of the following Wildlife Sanctuary from the mine lease area. i. Madei Wild life Sanctuary-14.105 km, E ii. Salim Ali Bird Sanctuary -10.553 km, SW iii. Bondla Wild life Sanctuary -20.476 km, SE
Wildlife Sanctuary	No	
Eco-Sensitive Zone(ESZ)/Eco-Sensitive Area(ESA)	No	

ix. Green belt/plantation details:

Proposed area for green belt/plantation	105.8894 ha
Budget for green plant& plantation till the end of life of mine.	Rs159.0Lakhs
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	25 ha
50 m safety zone of nallah, roads, electric lines	
Additional information (if any)	80.8894 ha (on backfilled area)

x. Rehabilitation & Resettlement:

R & R details	Not Applicable, as no resettlement is proposed during life of mine.
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xi. Details of Court Cases:

Court Case	Yes
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<p>Additional information (if any)</p>	<p>First Case:</p> <ol style="list-style-type: none"> 1. WP(Civil) 2478 of 2022 (Filling number) before the High Court of Bombay at Goa 2. The said writ petition has been filed against the State Government and seeks to challenge the identification of properties bearing survey no. 90/1(part) and 96/0 as part of the recently auctioned Bicholim mine. The petition alleges violation of Rule 5 &6 of Mineral Evidence Rules and Section 10B of MMDR, Act by the State of Goa and DMG. The petitioner has prayed for quashing of auction notice to the extend it includes the property of the petitioner and grant a writ of mandamus against the Respondents. 3. Case status is pending. 4. No adverse orders have been passed. 5. As per the last order Vedanta limited was added as a party to the petition as it has won the mine in auction. <p>Second Case:</p> <ol style="list-style-type: none"> 1. WP 592 of 2022 before the High Court of Bombay at Goa 2. The said writ petition seeks to challenge the constitutionality of the tender documents of Phase I auction of Goa mines. The petition alleges violation of Rule 5 & 6 of Mineral Evidence Rules by the State of Goa and DMG. The petition alleges non-disclosure of essential facts such as bore hole data, approved mining plan, production data of the previous five years and exploration data. The petitioner has prayed for quashing of auction notice to extend it fails to include the essential facts and in the alternative to stay the auction. 3. Case status is pending 4. No adverse orders have been passed. 5. As per the last order Vedanta limited was added as a party to the petition as it has won the mine in auction
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- xii. The Project Proponent submitted the Affidavit in a non-judicial stamp paper of Rs 100 bearing no: A807037 dated 24.04.2023 stating that they will directions issued by MoEF&CC vide Office Memorandum F.No.3-50/2017.IA.III (Pt) dated 30th May, 2018 in terms of directions given Hon'ble Supreme Court in judgment dated 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India &Ors.
- xiii. The total project cost estimated as Rs 250.0 Cr. The employment potential of direct employment will be 433 no.s and indirect employment will be 195 no.s.

3. Observation and Recommendation of the EAC: -

The Project Proponent informed the EAC that the instant mine lease was obtained through auction and the Government of Goa granted the Letter of Intent (LoI) dated 13.01.2023 for grant of mining lease for Block I - Bicholim Mineral Block for Iron Ore in Bicholim, Bordem, Lamgao, MulgaoMayem & Sirigao villages, Bicholim Taluka, North Goa District over an area of 478.5206 Ha for a period of 50 (fifty) years in pursuant to Rule 10(2) of the Auction Rules. This letter of intent is valid for a period of 3 (three) years from the date of its issuance. Then, the Project Proponent presented the KML file to indicate the site features in the vicinity of the mine lease area and in the study area of 10km radius. The EAC asked the Project Proponent to show the locations of the village, school and road in and around the mine lease area. The Project Proponent informed the EAC that the Assnora River is flowing adjacent to the mine lease boundary on the north western side. Few habitations, a temple and a primary school exists within the mine lease area. Habitations will not be disturbed. No forest land is involved in the mine lease area. Only acacia plantations exist within the mine lease area. The Project Proponent also informed the settling ponds are under construction. The EAC on viewing the KML file noted that old excavated pits exist within the mine lease area and Assnora River is located close to the proximity of the mine lease area. The Project Proponent informed the EAC that the ore will be transported from Mine to Sarmanas jetty through dedicated road with only 0.9km stretch of public road in use.

The EAC asked the Project Proponent whether there is any ban on mining activity in Goa. The Project Proponent informed the EAC that mining activity was not stopped because of CRZ and it may relate to sand mining only. The Project Proponent informed the EAC that the instant mine is a first auction mine in Goa. The Project Proponent also informed the EAC that there will be no activity of drilling and blasting. Mining Plan has been submitted to Indian Bureau of Mines (IBM) for approval. Nearest Village of ESA of Western Ghats is Bayalvada Village - 11.84 km. Waste will be dumped and backfilled within the mine lease area. The Project Proponent informed the EAC that there are two court cases filed against the State Govt. regarding auction procedure and the Project Proponent has been added as a party. There is no stay order or any adverse orders and the court case is in preliminary stage. The EAC was of the view that the instant ToR is subject to the outcome of the two said court cases i.e., WP(Civil) 2478 of 2022 (Filing Number) before the High Court of Bombay at Goa and WP 592 of 2022 before the High Court of Bombay at Goa. The EAC asked the Project Proponent to inform about the present status of the mining in Goa w.r.t Hon'ble Supreme Court order dated 07.02.2018. The Project Proponent informed the EAC that as per Hon'ble Supreme Court order dated 07.02.2018 in Special Leave to Appeal (Civil) No. 32138 of 2015 in the matter of the Goa Foundation vs M/s Sesa Sterlite Ltd. And Ors it was stated *the State of Goa was not under any constitutional obligation to grant fresh mining leases through the process of*

competitive bidding or auction and the Ministry of Environment and Forest was obliged to grant fresh environmental clearances in respect of fresh grant of mining leases in accordance with law.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its EAC (Non-Coal Mining) meeting held during 3-4 May, 2023, the EAC under the provisions of EIA Notification 2006 and its subsequent amendments, the EAC **recommended** the proposal for grant of Terms of Reference (ToR) to M/s Vedanta Limited for mining of Iron Ore in Bicholim Mineral Block – Block 1 (Auction Block) with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA (Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located in Bicholim, Bordem, Lamgao, Mulgoa, Mayem & Sirigao Villages of Bicholim Taluka of North Goa District, Goa for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions applicable for non-coal mining projects:-

- i. The EAC noted that the mine lease area is in close proximity to the Assnora River (flowing adjacent to the mine lease boundary on the north western side). The Project Proponent needs to submit the detailed report on the engineering design for garland drain, settling tank and check dams and its efficacy through recognized institution. The study should also include the per day silt load, settling velocity of the silt, retention time required based on the annual rainfall with a provision to monitor the water quality.
- ii. The Project Proponent needs to explore the likelihood of river water entering into the mine pit below the RL of the HFL and the measures that are required to be taken for prevention of seepage and in the event of seepage to drain out the water through settling tank.
- iii. The Project Proponent needs to submit the action plan for shifting the School within the mine lease area. PP should also provide the details of the nearest school present within the mine lease area and in the vicinity of the mine lease area by mentioning the distance and direction of the school from the mine lease area, strength of the school, working time of school, blasting time and the measures to be taken for control of ground vibration and fly rock.
- iv. The Project Proponent needs to submit the detailed site specific protection measures for the surface features such as habitations, water bodies, school, temple, road in and around the vicinity of the mine lease area.
- v. The Project Proponent needs to submit the plan for ecology restoration.

- vi. The Project Proponent needs to submit the action plan for year wise backfilling.
- vii. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
- viii. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air and noise pollution.
- ix. The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the centre on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road and the carrying capacity of the road. The Project Proponent shall ensure that the transportation route shall not pass through any village road.
- x. The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
- xi. The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
- xii. The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.

- xiii. The Project Proponent shall prepare the scheme for mandatory recycle/reuse of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
- xiv. The Project Proponent needs to submit the greenbelt/afforestation development plan for undertaking plantation in the periphery of the mine lease boundary, safety zone etc., The details of the no. of saplings proposed, type of species, spacing and the area to be covered including the cost and timeline for completion of plantation needs to be provided in the EIA report.
- xv. The Project Proponent needs to submit employment based skill development plan for the local people and thrust should be to provide employment to local people after imparting training.
- xvi. The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.
- xvii. During the meeting, the EAC noted that old excavated pits exist within the mine lease area. Hence, the Project Proponent needs to submit a letter from the Department of Geology and Mining, Government of Goa clarifying whether any illegal mining within the mine lease area has been carried out or not and whether the same has been carried out by M/s. Vedanta Limited or not?
- xviii. The Project Proponent shall ensure the validity of the baseline data and public hearing are valid as per Ministry's OM dated 08.06.2022 at the time of submission of proposal for EC.
- xix. The instant ToR is subject to the outcome of the two said court cases i.e., WP(Civil) 2478 of 2022 (Filing Number) before the High Court of Bombay at Goa and WP 592 of 2022 before the High Court of Bombay at Goa.

1.3 Sagmania Limestone Mine of M/s Birla Corporation Ltd with Limestone production capacity of 4.9MTPA, OB removal: 7.86 MTPA, Soil removal: 0.30 MTPA (Total Excavation: Excavation: 13.06 MTPA) along with the existing 2 no. of crushers i.e., 1200 TPH and 800 TPH capacity in the mine lease area of 852.50 ha, located at Villages- Barikalan, Baraj, Puraini, Bathiakhurd, Bharjunakalan, Nimi & Naina, Tehsil Raghurajnagar, District- Satna, Madhya Pradesh -[File No: J-11015/271/2006-IA.II(M), Proposal No: IA/MP/MIN/425852/2023; Consultant: M/s Perfect Enviro Solutions Pvt. Ltd.] - Terms of Reference (Violation under SOP dated 07.07.2021)

The instant proposal is for Terms of Reference of M/s Birla Corporation Limited for mining of Limestone in Sagmania Limestone Mine with Limestone production capacity of 4.9 MTPA, OB removal: 7.86 MTPA, Soil removal: 0.30 MTPA (Total Excavation: Excavation: 13.06 MTPA) along with the existing 2 no. of crushers i.e., 1200 TPH and 800 TPH capacity in the mine lease area of 852.50 ha, located at Villages- Barikalan, Baraj, Puraini, Bathiakhurd, Bharjunakalan, Nimi&Naina, Tehsil Raghurajnagar, District-Satna, Madhya Pradesh.

2. The details of the project as ascertained from the document submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

- i. The mine lease area is located between Latitude: 24°39'52.6"N to 24°37'4.5"N and Longitude: 80°55'10.6"E to 80°51'44.5" E. The mine lease falls under the Survey of India Toposheet No. 63D/14 and falls in Seismic zone II.
- ii. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.
- iii. The Project Proponent has initially submitted the proposal for amendment in EC in Form-4 vide proposal no. IA/MP/MIN/198657/2021 dated 17.02.2021. The instant proposal was earlier considered in the 33rd EAC meeting held during 13th to 16th July, 2021 and after detailed deliberations, the Committee returned the proposal in present form. Then, the Project Proponent again submitted the online application for amendment in EC vide proposal no: IA/MP/MIN/264555/2022 dated 29.03.2022. The proposal for amendment in environmental clearance was considered in the 49thEAC (Non Coal Mining) meeting held during 19-21 April, 2022. After detailed deliberations made by the Project Proponent and the Consultant, the Committee noted that the Project Proponent initially obtained Environmental Clearance on 17.09.2007 and 27.12.2007 and the PP operated the mines without obtaining Environmental Clearance from 1994 to 2006 and also PP obtained the 2nd renewal of mining lease on 13.10.2010 and at this stage PP required to obtain EC as per Ministry's OM No.J15012/35/2007-IA.II(M)-Part dated 2nd July, 2007. However, project proponent has not obtained the EC at the time of renewal of mine lease. The Committee also noted that the PP has been operating the mines from 13.10.2010 without obtaining amendment in Environmental clearance from change in reduction of mine lease area from 939.78 ha to 852.50 ha. Thus, the Committee was of the view that the instant case attracts the Hon'ble Supreme Court Judgment dated 02.08.2017 in W.P.C 114 of 2014 in the matter of Common cause Vs Union India and violation of EIA Notification, 2006. Further, the Committee noted that the instant proposal is for amendment in environmental clearance for reduction in mine lease area from 939.78 ha to 852.50

ha and intersection of ground water table during mining activity. The Committee observed that due to the above amendment sought by the PP, there will be change in pit size and reduction in land which requires detailed assessment through the proper impact assessment report. The Committee also observed that the PP has not submitted the final closure report issued by the IRO for earlier EC compliance. The Committee opined that the PP should apply for a fresh ToR under violation for seeking environment permission for reduction in mine lease area from 939.78 ha to 852.50 ha and intersection of ground water table during mining activity. Thus, the Committee was of the view that the instant proposal for amendment in EC was not accepted and the Ministry should take action against the Project Proponent for violation under the provisions of Environment (Protection) Act, 1986 and therefore the Committee returned the proposal in present form.

- iv. Thereafter, the Project Proponent vide letter Ref: BCL/SLSM/MoEF&CC/ECAmend/2022-23/64 dated 11.10.2022 submitted that the instant proposal is not a violation case under EIA Notifications and submitted the point wise reply to the issues raised in the 49thEAC (Non-Coal Mining) Meeting held during 19-21 April, 2022. In this regard, the instant proposal was placed in the 10thEAC (Non-Coal Mining) meeting held on 8th February, 2023 for due deliberations of EAC. The EAC during 08.02.2023 deliberated the representation dated 11.10.2022 of project proponent and the EAC reiterated the recommendations of the earlier EAC meeting held during 19th to 21st April, 2022 and the EAC opined that the project proponent should apply for a fresh ToR under SOP violation. Thus, the Committee was of the view that the instant proposal for amendment in EC was not accepted and the Ministry should take action against the Project Proponent for SOP violation under the provisions of Environment (Protection) Act, 1986.
- v. In view of the above, the Project Proponent has submitted a fresh proposal for Terms of Reference under Violation for increase in depth of Mining and intersecting ground water table without change in existing Limestone production capacity of 4.9 MTPA and reduction of Mining lease area from 939.78 Ha to 852.50 Ha. Accordingly, the proposal was considered in the 14th EAC (Non-Coal Mining) meeting held during 3-4 May, 2023.
- vi. Details of Previous Environmental Clearance (EC):
 - a) The Project Proponent submitted that initially Environmental Clearance was obtained vide EC Lr. No. J-11015/123/2005-IA.II(M) dated 17.09.2007 for limestone production capacity of 3.3 MTPA over an area of 939.78 ha.
 - b) Then, Project Proponent obtained Environmental Clearance vide EC Lr. No J-11015/271/2006-IA.II(M) dated 27.12.2007 for an expansion of limestone production from 3.3 MTPA to 4.9 MTPA by opencast mechanised method involving total lease area of 939.78 ha.

vii. Details of Mine Lease:

- a) The Project Proponent submitted that initially mining lease was granted over an area of 2469 Ha (6101 acre) from Govt. of MP, Mineral Resource Department for a period of 20 years from 19.10.1956 to 18.10.1976.
- b) The 1st renewal of mining lease was renewed vide order no. F-3-182/76/12/6 dated 22.04.1977 over an area of 1000 Ha for a period of 20 years from 19.10.1976 to 18.10.1996.
- c) Project Proponent submitted that the application for 2nd renewal of mine lease was submitted on 13.10.1995 and 2nd renewal of mining lease granted by Govt. of Madhya Pradesh vide Order no. F-3-234/97/12/1 dated 13.10.2010 over an area of 852.50 Ha for a period of 20 years from 19.10.1996 to 18.10.2016. During second renewal of mining lease, the State Govt. reduced the mining lease from 939.78 ha to 852.50 ha.
- d) Then, the Project Proponent submitted that the application for 3rd renewal application was submitted on 31.07.2015 and 3rd renewal of mining lease granted by the Govt. of Madhya Pradesh vide Order no. F-19-5/2015/12-1, Bhopal dated 12.03.2015 stating that as per provisions of the Mines and Minerals (Development and Regulation) Amendment Act, 2015, 8 (A) (5), the period of lease granted before the date of commencement of the Mines and Minerals (Development and Regulation) Amendment Act, 2015 (10 of 2015), where mineral is used for captive purpose, shall be extended and be deemed to have been extended up to a period ending on the 31st March, 2030 with effect from the date of expiry of the period of renewal last made or till the completion of renewal period, if any, or a period of fifty years from the date of grant of such lease, whichever is later, subject to the condition that all the terms and conditions of the lease have been complied with. The last renewal is deemed renewed from 18.10.2016 to 31.03.2030.

viii. Land Use/Land Cover of the Mine Lease Area:

Private land	702.27 Ha
Government land	150.23 ha
Total Mining lease area (MLA), ha	852.50 ha
Private land for crusher, workshop & other infrastructure outside the MLA	NA

ix. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/DMG)	Letter No.	MP/Satna/LST/RMP-22/2020-21
	Date	24.12.2020
	Mineral &(Major/Minor)	Major
	Mine Lease Area, Ha	852.50

	Validity	31.03.2026
Mining Parameters	Quantitative Description	
Method of Mining	Opencast fully mechanized mining	
Drilling/Blasting	Fully Mechanized opencast using HEMM and deep hole drilling.	
Geological Reserves	130.9 MTPA	
Mineable Reserves	75.35 MTPA	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/Waste, MTPA)	Total Excavation-13.06 MTPA (Comprising 4.9 MTPA of limestone, 7.86 MTPA of OB and 0.30 MTPA of Soil)	
Life of mine	16 Years	
Mine Bench Height & Bench Width	The height of the bench is 6 - 9 m The width of the bench is 15m-20m on average.	
No. of Mine Benches	2	
Existing Depth, m bgl	average 15 m	
Ultimate Depth of Mining, m bgl	Avg 56 m (up to 255m RL)	
Ground Water Table, m bgl	20 m	
Details of ground water intersection	The water table in the core zone varies between 25m-30m bgl (285m – 280m RL) during pre-monsoon and 20-25m bgl (290m – 285m RL) during post monsoon. The current mine working has not intersected ground water table and complied with the condition as stipulated under specific condition (iii). However due to some land constraints, quality issue & further exploration has revealed that second band limestone exist below ground water table and accordingly mining plan has been revised with same production capacity of 4.9 million TPA.	
Individual bench slope	80° to 85° from horizontal	
Overall pit slope	<45°	
Details of existing/ proposed Crusher	Existing 2 no. of crushers, capacity are 1200 TPH and 800 TPH	
Mineral Beneficiation	NA	
RoM output size	-25 mm	
Transportation details including capacity of dumper/tipper, mode of transport and distance	The broken material will be transported using 9 no. of 60 Tons capacity dumper. The mineral after crushing is transported through a conveyor belt and bi-cable ropeway to the Satna Cement Works of M/s. Birla Corporation Ltd located at 4.05 Km in SW direction, for manufacturing of cement.	
Generation of Topsoil/OB, Mineral Rejects/ Waste& its Management during plan period & conceptual period	7.86 MTPA of OB and 0.30 MTPA of Soil will be generated. The OB will be temporary dump and later on will be used for backfilling. The generated topsoil will be stacked separately and will be used	

	for plantation.
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x. Water requirement:

Total water requirement	504 KLD	Fresh water	49 KLD
		Treated water	49 KLD
		Pit Water	406 KLD
Source	406 KLD will be supplied by pit water. Ground water 49 KLD used for drinking and domestic purposes will be taken from bore-well and remaining 49 KLD treated water (workshop & Domestic) used for plantation and mining operation.		
Permission for withdrawal/ intersection along with details of grant and its validity	Project Proponent submitted the No Objection Certificate (NOC) for Groundwater abstraction obtained vide CGWA/NOC/MIN/ORIG/2021/13750 for abstraction of 290.0 m ³ /day and dewatering of 329.0 m ³ /day which is valid from 16/11/2021 to 15/11/2023.		
Additional information (if any)	Accumulated rain water in the pits will also be used for dust suppression and plantation.		

xi. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest:

Particulars	Particular's Name	Distance & Directions
Village	Bela	0.41 km, SSW
Town	Satna	5.1 km, SW
Highway	Satna- Semariya Road Polytechnic Road	81 m from the pit limit 2.93 km, SSW
Interstate Boundary	NA	NA
Railway Station/Railway line	Sakaria railway station	1.69 km, SE
Water Bodies	BadkharNala Talab near Chakmurar Pond near Muran Magardaha N Chuhar N Satna River (Not showing Topo map) Tons or TamasaRiver(Not Showing Google Earth) Sindhi Comp TalabSimrawalNadi Narayan Talab Bagha Pond (Talab) Gahira N Jagat Dev Talab Hathia N Rani Talao	1.26 km, SSE 2.48 km, SE 3.83 km, SE 5.08 km, NW 5.20 km, NW 5.22 km, SE 5.29 km, SE 5.30 km, SW 5.49 km, NE 6.03 km, SSW 6.23 km, SW 6.51 km South 6.83 km, SW 7.28 km, NNE 7.55 km, SSE

	Choker N LagnaNala DhawariTalab Canal near Ganesha	7.80 km, N 8.04 km, NNW 9.45 km, SW 9.55 km, SE
Forest	Reserved Forest near Khamharia Reserved Forest near Bhatpurwa Reserved Forest near Khamhariyapayasin Jamori Reserved Forest Reserved Forest near Khajurehara Reserved Forest near Bandarkha Reserved Forest near Hinauta Reserved Forest near R F Majhiar Reserved Forest near Majhiar Reserved Forest near Chulhi	2.74 km, SE 2.93 km, SE 3.79 km, SE 3.95 km, SE 6.23 km, SE 8.10 km, SE 8.15 km, SE 8.53 km, SE 8.91 km, SE 9.19 km, SE

xii. Presence of Environmentally Sensitive areas in the study area:

Forest Land/ Protected Area/ Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	---
National Park	No	
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone (ESZ)/Eco- Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	The project is for ToR Appraisal, details of schedule- I species will be submitted at the time of final submission of EIA/EMP report.	
Wildlife Conservation Plan		

xiii. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	At the end of mining, out of total mined out area, in addition 148.96 ha of area will be backfilled & afforested.
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	It is proposed to plant about 3,52,400 plants in Mine Lease area. Survival rate: 85 %
Budget for green plant & plantation till the end of life of mine.	Rs 164.55 Lacs
Budget for nursery	Nil
Details of existing plantation and its survival rate	Till date, about 2.73 lacs saplings have planted in Mine Lease area with Survival rate of 85 %
No. of tree cuts in the mine lease area and compensatory afforestation	Nil
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	25.00 Ha

xiv. Details of CTE/CTO, Certified Compliance Report, Certified Production Details from the inception of the mine:

Particulars	Details of Letter along with date of grant and validity
Consent to Establish (CTE)	CTE was granted by the State Pollution Control Board vide letter no. 9002/TS/Mine/MPPCB/2007 dated: 26.11.2007.
Consent to Operate (CTO)	CTO renewal was obtained from State Pollution Control Board vide consent No: AW-57721 dated 03/03/2023 and is valid up to 31.03.2024.
Certified Compliance Report and Inspection date	The Project Proponent submitted the EC compliance report certified by Regional Office, Bhopal vide File No 3-35/2012(ENV)/796 dated 01.12.2020 wherein the IRO noted that out of total 41 conditions, 32 are complied, 4 are partially complied, 2 are agreed to comply, 1 is compliance in progress, and 2 are not applicable and IRO asked the PP to submit the time bound action for early compliance and also to submit the action taken report in this regard. Inspection Date: 19.07.2020
Certified Production Details from the inception of the mine (in tabular form against the EC capacity)	The Project Proponent submitted the certified past production details for the period 2005-06 to 2019-20 vide LrNo. 683/Khanij/2022 dated 23.03.2022 from the period 1993-94 to 2020-21. The Project Proponent submitted the Affidavit in a non-judicial stamp paper of Rs 50 bearing no: P 059208 dated 31.03.2023 stating that they will comply with all the statutory requirement & judgment of Hon'ble Supreme Court dated 2 nd August 2017 in writ Petition (civil) No. 114 of 2014 in the matter of common cause versus Union of India &Ors'.

- xv. The Project Proponent has submitted that since it is an existing mine in which mining has been in operation since October 1959, Rehabilitation and Resettlement (R &R) Planis not applicable to this project.
- xvi. The Project Proponent has submitted that there is no litigation pending against the project and/or land in which the project is proposed to be set up.

xvii. Details of Project cost and Employment:

Particulars	(Rs. In Crore)
Project Cost	Existing Cost: Rs72.42 Crores and Proposed Cost:Rs16 Crores
Employment (No.s)	333

3. Observation and Recommendation of the EAC: -

The Project Proponent informed the EAC that initially Environmental Clearance was obtained vide EC letter dated 17.09.2007 for limestone production capacity of 3.3 MTPA over an area of 939.78 ha. Then, again Environmental Clearance was obtained vide EC letter dated 27.12.2007 for an expansion of limestone production from 3.3 MTPA to 4.9 MTPA involving total lease area of 939.78 ha. The Project Proponent also informed the EAC that earlier, proposal for amendment in EC dated 27.12.2007 was submitted to the Ministry for reduction in mine lease area from 939.78 ha to 852.50 ha and intersection of ground water table during mining activity. The instant proposal was earlier considered in the EAC meetings held during 13-16 July, 2021, 19-21 April, 2022 and 8th February, 2023 and the EAC opined that the PP should apply for a fresh ToR under violation for seeking environment permission for reduction in mine lease area from 939.78 ha to 852.50 ha and intersection of ground water table during mining activity. Thus, the Committee was of the view that the instant proposal for amendment in EC was not accepted and the Ministry should take action against the Project Proponent for violation under the provisions of Environment (Protection) Act, 1986 and therefore the Committee returned the proposal in present form. Accordingly, the PP submitted, a fresh proposal for Terms of Reference under SOP violation.

The Project Proponent presented the KML file and explained the site features in and around the mine lease area and in the study area of 10 km radius. One village road is passing through the mine lease area. Few habitations are present within the mine lease area and no school is located within the mine lease area. The mine lease is valid upto 31.03.2030. Mining Plan approved on 24.12.2020 and is valid for the period upto 31.03.2026. Baseline data was collected during October - December 2022. There is no change in maximum production of 4.9 MTPA.ROM will be transported to the existing cement Plant. The Project Proponent also informed the EAC that at the end of the conceptual stage, an area of 553.51 ha will be converted into water reservoir, an area of 149.61 ha will be backfilled and area of 48.03 ha will remain undisturbed. The Project

Proponent informed the EAC that public hearing of the project was earlier held on 25.03.2006 and requested the EAC to exempt the public hearing. The EAC was of the view that since the proposal of ToR is under Ministry's SOP dated 07.07.2021, the request of exemption of the public hearing cannot be accepted. The Project Proponent has informed the EAC that there is also an excess in production capacity i.e., 2.66 MTPA against the CTO capacity (2.50 MTPA) during the year 1996-97. The compliance of SOP will be submitted at the time of appraisal of EC. Further, the Project Proponent informed the EAC that there is no court case/litigation pending against the project.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC again reiterated the minutes of the earlier EAC meeting held during 19-21 April, 2022 and 8th February, 2023. The Project Proponent initially obtained Environmental Clearance on 17.09.2007 and 27.12.2007 and the PP operated the mines without obtaining Environmental Clearance from 1994 to 2006 and also PP obtained the 2nd renewal of mining lease on 13.10.2010 and at this stage PP required to obtain EC as per Ministry's OM No. J15012/35/2007-IA.II(M)-Part dated 2nd July, 2007. However, project proponent has not obtained the EC at the time of renewal of mine lease. The Committee also noted that the PP has been operating the mines from 13.10.2010 without obtaining amendment in Environmental clearance from change in reduction of mine lease area from 939.78 ha to 852.50 ha. Thus, the Committee was of the view that the instant case attracts the Hon'ble Supreme Court Judgment dated 02.08.2017 in W.P.C 114 of 2014 in the matter of Common cause Vs Union India and violation of EIA Notification, 2006. The EAC asked the Ministry to take action against the Project Proponent for violation of EIA Notification, 2006 under the provisions of Environment (Protection) Act, 1986.

Based on the above discussions, the EAC in its meeting held during 3-4 May, 2023, under the provisions of EIA Notification 2006 and its subsequent amendments, **recommended** the proposal for grant of Terms of Reference (ToR) under Ministry's SOP dated 07.07.2021 to M/s Birla Corporation Limited for mining of Limestone in Sagmania Limestone Mine with Limestone production capacity of 4.9 MTPA, OB removal: 7.86 MTPA, Soil removal: 0.30 MTPA (Total Excavation: Excavation: 13.06 MTPA) along with the existing 2 no. of crushers i.e., 1200 TPH and 800 TPH capacity in the mine lease area of 852.50 ha, located at Villages- Barikalan, Baraj, Puraini, Bathiakhurd, Bharjunakalan, Nimi & Naina, Tehsil Raghurajnagar, District- Satna, Madhya Pradesh for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions applicable for non-coal mining projects:-

- i. The State Government/SPCB to take action against the project proponent under the provisions of the Environment (Protection) Act, 1986 and further no consent to operate to be issued till the project is granted EC. If the action has been initiated by the State/State PCB, status of the same may be submitted to the Ministry.

- ii. The Project Proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.
- iii. Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment.
- iv. Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
- v. The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.
- vi. The Project Proponent needs to submit the penalty provisions as per Ministry's SOP dated 07.07.2021 at the time of appraisal of EC.
- vii. The Project Proponent shall comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- viii. Details of benefit accrued during the violation period along with capital cost of the project is to be submitted.
- ix. The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.II(M) dated 25.10.2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.

- x. The Project Proponent needs to submit the mitigation measures for protection of agricultural land as well as the sequence of mining proposed to close proximity of the agricultural land.
- xi. The Project Proponent needs to submit the action plan for year wise backfilling.
- xii. The Project Proponent needs to submit the water management plan over an area of 553.51 ha which is proposed to convert into water reservoir.
- xiii. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
- xiv. The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.
- xv. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air and noise pollution.
- xvi. The Project Proponent needs to submit the action plan for carrying out plantation along the 7.5m barrier, safety zone of roads and gap plantation. PP should also submit the details no of saplings planted and to be planted, type of saplings existing and proposed and the area covered and to be covered under greenbelt/plantation along with the timeline and budget.
- xvii. The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
- xviii. The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The

project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.

- xix. The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
- xx. The Project Proponent shall prepare the scheme for mandatory recycle/reuse of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
- xxi. The Project Proponent needs to submit employment based skill development plan for the local people and thrust should be to provide employment to local people after imparting training.
- xxii. The Project Proponent needs to submit the latest Certified Compliance Report issued by the Ministry's IRO at the time of appraisal of EC.
- xxiii. The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.

1.4 Hutti Gold Mines (ML No: 2671) of M/s The Hutti Gold Mines Company Limited for expansion in production capacity from 0.6 MTPA to 0.9 MTPA (2000 TPD to 3000 TPD) and enhancement of processing plant capacity of 0.9 MTPA – 1.2 MTPA (3000 TPD to 4000 TPD) in the mine lease area of 528.35 ha, located at Hutti Village, Lingsugur Taluk, Raichur District, Karnataka - [File No: J-11015/13/2003-IA.II(M), Proposal No: IA/KA/MIN/405968/2022; Consultant: M/s Hubert Enviro Care Systems] - Terms of Reference (Expansion)

The instant proposal is for Terms of Reference of M/s The Hutti Gold Mines Company Limited for expansion in production capacity from 0.6 MTPA to 0.9 MTPA (2000 TPD to 3000 TPD) and enhancement of processing plant capacity of 0.9 MTPA – 1.2 MTPA (3000 TPD to 4000 TPD) in the mine lease area of 528.35 ha, located at Hutti Village, Lingsugur Taluk, Raichur District, Karnataka.

2. The details of the project as ascertained from the document submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

- i. The mine lease area is located between Latitude: 16°12'29.55813"N to 16°11'57.54790"N and Longitude: 76°39'38.73430" E to 76°39'42.06560"E. The mine lease area falls under the Survey of India Toposheet No: 56 D/12.
- ii. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.
- iii. Details of previous Environmental Clearance (EC):
 - a) Initially, the Project Proponent obtained Environmental Clearance (EC) vide EC Lr.No: J-11015/13/2003.IA.II(M) dated 17.11.2004 for Hutti Underground Gold mine of M/s Hutti Gold Mines Company Ltd., for expansion in production of Gold ore from 0.351 MTPA to 0.6 MTPA over an area of 308.35 ha under the EIA Notification, 1994.
- iv. Details of Mine Lease:
 - a) The Project Proponent has submitted that initially mining lease deed was executed on 20.12.1978.
 - b) The original grant notification was issued vide Notification No. CI 128 MMN 2011, dated 26.03.2012.
 - c) The Project Proponent submitted the copy of the mine lease deed made on 22.03.2014 for a period of 20 years w.e.f. 19.12.2008.
 - d) The Project Proponent submitted the letter issued by the Govt. of Karnataka vide Lr No. CI 113 CMC 2016 Bengaluru, dated 14.02.2019 stating that as per the provision of Section 8A (8) of MMDR Act, 1957 read with Rule 3(1) of the Mineral (Mining by Government Company) Rules, 2015, the period of mining lease bearing no: 2671 held by M/s Hutti Gold Mines Company Limited shall extended up to 19.12.2028.
- v. The Project Proponent has submitted that the entire mine lease area of 528.35 ha is a Govt. land.
- vi. Details of Mining Plan:
 - a) The Project Proponent has submitted that the Modification of Mining Plan along with Progressive Mine Closure Plan was approved by Indian Bureau of Mines vide Lr.No: 279/356/92/BNG/803 dated 09.04.2018 for mining of Gold over an area of 528.35 ha for the period 2018-19 to 2022-23.
 - b) The method of mining will be mechanized underground mining method.
 - c) The mined out ore will be transported to the processing plant by trucks and conveyor belt. The gold ore will be treated in processing plant by various stages to recover the final product gold.

- d) The oxide ore will be mined first and will be extracted by adopting Grinding, Gravity Concentration, Thickening & Leaching-Carbon-In-Pulp-Elution & Electro Winning-Cyanide Detoxification-Refining.
 - e) The mill tailings will be disposed of separately in a designated tailing dump within the mine lease area. The tailings will be disposed by pumping in slurry form.
 - f) The generation of waste rock estimated as around 4,37,414 Tonnes during the period 2020-21 to 2022-23, out of which 49% will be used as road metal, building construction jobs and remaining 51% as filling materials in completely depleted stopes. There is no sub grade ore or mineral produced.
 - g) Disposal methods being practiced includes coarse material in stope filling in underground and fine material is stored in upstream embankment method in tailings dam. About 1400-1500 tonnes per day, tailings estimated to dispose to the dump and 300-400 tons per day coarse sand estimated to be used for stope filling.
- vii. The Project Proponent has submitted that the source of supply of water is from Krishna river (20 km from mine), Dump recycling water and mined out water. About 25.88% of water is recycling. About 4600 KLD of water from Krishna river is being used every day. For the expansion proposals, the required quantity of water for additional manpower, ore processing works out to be 1320 KLD and will be met from Krishna river and recycled water.
- viii. The Project Proponent has submitted that there is no forest land within the mine lease area and Reserve Forests are located more than 5km from the mine lease area. The Project Proponent also submitted that there is no National Park, Wildlife Sanctuary, Eco Sensitive Area, Western Ghats within 10 km radius of the mine lease area. Further, the Project Proponent has submitted that HuttiNadi (Seasonal Odai), Odai (Seasonal nala) are found within the mine lease area and Canal near medinapur and Hire halla are located at a distance of 0.77 km, W and 1.81 km, WNW respectively from the mine lease area. Hutti village is located within the mine lease area.
- ix. The Project Proponent has submitted that an area of 66.08 ha has been developed under greenbelt. The proposed area for the development of greenbelt will be 108.27 ha and no. of saplings proposed to plant is 1,51,578 no.s with a budget of Rs 1500 Lakhs.
- x. The Project Proponent vide letter dated 24.04.2023 submitted an undertaking stating that the proposed expansion proposal is not a violation as per provision S.O 804 (E) dated 14.03.2017 and SOP dated 07.07.2021. The Project Proponent vide letter dated 18.11.2022 submitted a self-certified production details from the year 2004-05 to 2021-22.

S. No	Year	Tonnage	EC capacity (Tonnes)
1	2004-05	4,54,185	6,00,000

2	2005-06	4,85,512	6,00,000
3	2006-07	5,01,472	6,00,000
4	2007-08	5,04,654	6,00,000
5	2008-09	4,98,935	6,00,000
6	2009-10	4,96,350	6,00,000
7	2010-11	4,49,839	6,00,000
8	2011-12	4,86,539	6,00,000
9	2012-13	4,86,729	6,00,000
10	2013-14	4,68,735	6,00,000
11	2014-15	5,24,607	6,00,000
12	2015-16	5,38,216	6,00,000
13	2017-18	508912	6,00,000
14	2018-19	537407	6,00,000
15	2019-20	540319	6,00,000
16	2020-21	380318	6,00,000
17	2021-22	419668	6,00,000

- xi. The Project Proponent has submitted that since it is an underground mine, the question of reclamation and rehabilitation does not arise and no R&R is involved in this project.
- xii. The Project Proponent has submitted that there is no litigation pending against the project and/or land in which the project is proposed to be set up.
- xiii. The Project Proponent has submitted that the total cost of the proposed expansion project is Rs 10,000 Lakhs. The existing manpower is 3892 persons and the proposed manpower for the expansion will be 1000 persons.

3. Observation and Recommendation of the EAC: -

The Project Proponent/Consultant informed the EAC that the instant proposal is for Terms of Reference for expansion in production capacity of Gold from 0.6 MTPA to 0.9 MTPA (2000 TPD to 3000 TPD) and enhancement of processing plant capacity of 0.9 MTPA - 1.2 MTPA (3000 TPD to 4000 TPD) in the mine lease area of 528.35 ha. The EAC asked the Project Proponent whether the past production details have been certified by the Department of Mines and Geology, Govt. of Karnataka. The Project Proponent informed the EAC that the past production details have not been certified by the Department of Mines and Geology. The EAC observed that the Ministry earlier sought essential details on 17.11.2022 and requested the Project Proponent to provide certified past production details and also inform whether the proposal attracts 2 (b) under EIA, 2006. The EAC also observed that the Project Proponent has submitted the self-certified past production details from the year 2004-05 to 2021-22. Further, the EAC observed that the Project Proponent has missed out the year 2016-17. The EAC asked the Project Proponent whether 2(b) Mineral Beneficiation activity is involved in the project or not. The Project Proponent informed the EAC that the instant project involves 2(b) Mineral

Beneficiation as per EIA Notification, 2006. The EAC noted that Project Proponent submitted the proposal for Terms of Reference for 1(a) Mining of Minerals only. The EAC opined that the Project Proponent needs to submit the fresh proposal for both activity 1(a) Mining of Minerals and 2(b) Mineral Beneficiation.

Then, the EAC asked the Project Proponent/Consultant to present the KML file to indicate the site features in the study area of 10 km radius. During the deliberation, the EAC noted that the Consultant could not able to bring out the technical details before the EAC. The EAC also noted that the Project Proponent have not submitted the proposal under the Ministry's Notification S.O 1530(E) dated 06.04.2018 for revalidation of EC. The EAC opined that the Project Proponent needs to submit the certified past production details from the Department of Mines and Geology since the inception of the mine, copies of all Consent to Establish/Consent to Operate along with Annexure-III for detailed examination of violation. Further, the EAC observed that even after the essential details sought, the Project Proponent/Consultant did not submit the desired details sought by the Ministry. The EAC also observed that the overall performance of the Consultant is not satisfactory. Based on the above discussions, the EAC **returned the proposal in present form** and it was of the view that the proposal may be considered only after submission of the following information: -

- i. The Project Proponent needs to submit the fresh proposal for both activity 1(a) Mining of Minerals and 2(b) Mineral Beneficiation.
- ii. The Project Proponent needs to submit the certified past production details from the Department of Mines and Geology since the inception of the mine, copies of all Consent to Establish/Consent to Operate along with Annexure-III for detailed examination of violation.
- iii. The Project Proponent needs to give proper justification that why the instant proposal was not submitted under the Ministry's Notification S.O 1530(E) dated 06.04.2018 for revalidation of EC.

1.5 Taliha Graphite Deposit of M/s Sthenos Cement Private Limited for mining of Graphite with proposed production capacity of 4,10,879 TPA (ROM) of Graphite, Topsoil: 82,201.99 TPA, OB/SB/IB: 3,58,926.45 TPA, Total Excavation: 8,52,007.4 TPA along with the setting up of three mobile crushers at pit mouth with capacity of 100 t/h each to crush the mineralized material to <80 mm size in the mine lease area of 496.0 Ha, located at Village Taliha, Tehsil Taliha, Upper Subansiri District, Arunachal Pradesh – [F.No: IA-J-11015/32/2022-IA-II(NCM), Proposal No: IA/AR/MIN/285470/2022, Consultant: M/s VardanEnviroNet] – Reconsideration of Terms of Reference (ToR)

The instant proposal is for Terms of Reference (ToR) of M/s Sthenos Cement Private Limited for mining of Graphite in Taliha Graphite Deposit with proposed production capacity of 4,10,879 TPA (ROM) of Graphite, Topsoil: 82,201.99 TPA, OB/SB/IB: 3,58,926.45 TPA, Total Excavation: 8,52,007.4 TPA along with the setting up of three mobile crushers at pit mouth with capacity of 100 t/h each to crush the mineralized material to <80 mm size in the mine lease area of 496.0 Ha, located at Village Taliha, Tehsil Taliha, Upper Subansiri District, Arunachal Pradesh.

2. The details of the project as ascertained from the document submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

- i. The mine lease area is located between Latitude: 28°13'30.539"N to 28°14'41.651"N and Longitude: 94°07'6.850" E to 94°09'26.539"E. The mine lease area falls under the Survey of India Toposheet No: 82L/4 and falls in Seismic Zone-V.
- ii. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.
- iii. The proposal was earlier considered in the 2nd EAC (Non-Coal Mining) Meeting held during 16 - 18 August, 2022 wherein the EAC deferred the proposal for want of requisite information. The Project Proponent vide letter dated 13.09.2022 submitted the information in PARIVESH portal on 14.09.2022. Accordingly, the proposal was reconsidered in the 5th EAC (Non-Coal Mining) meeting held during 18th- 20th October, 2022. After detailed deliberations, the EAC noted that the mine lease is located in the north eastern region and falls under seismic zone V. The EAC noted that the project site has hilly terrain and is rich in greenery. Three villages are located in the lease area and 34 villages are within 5 kilometers distance. The subanshiri river flows through the mine lease area. The drainage of the area is mainly controlled by the gullis and valley of the terrain as well as the natural slope of the area. The proposed mining shall result in topographical changes that will require stabilization. The project also involves construction activities to meet the infrastructure needs for the mine. In view of the above, the EAC opined that a subcommittee comprising of EAC members and Officials of the Ministry may visit the site to ascertain the ground realities of the project. Therefore, the EAC deferred the proposal.
- iv. In view of the above, the Ministry vide order dated 09.03.2023 has constituted a Sub-Committee and the field visit undertaken by EAC sub-committee during 7-13 April, 2023. Then, the Project Proponent vide letter dated 14.04.2023 requested the Ministry to consider the proposal as the sub-committee visited the site on 10.04.2023. Accordingly, the proposal was again considered in the 14th EAC (Non-

Coal Mining) meeting held during 3-4 May 2023 along with the site visit report of the sub-committee.

v. Details of Mine Lease:

S. No	Lease Particulars	Date of Grant	Mineral	Mine lease area, Ha	Period	Granted by
1	Letter of Intent for grant of mining lease vide Lr No DGM/ML/GHP T/SCPL/470/2 019/3014-3020	21.08.2019	Graphite	496	50 years	Govt. of Arunachal Pradesh
2	Grant of mining lease vide Lr No DGM/ML/GHP T/SCPL/470/2 019/4019-32	29.01.2021	Graphite	496	50 years	Govt. of Arunachal Pradesh

vi. Details of executed Mine leases:

S. No	Date of grant of Lease execution	Period of Grant		Details
		From	To	
1	Date of entering into original lease deed.	05.02.2021	04.02.2071	Mining lease deed executed on 29.01.2021 between the Governor of Arunachal Pradesh and M/s Sthenos Cement Private Limited and registered on 05.02.2021 for the term of 50 years.

vii. Land Use/Land Cover of the Mine lease area:

Private land	476.78 ha
Public road	7.74 ha
River	11.48 ha
Total Mining lease area (MLA)	496.00 ha
Private land for crusher, workshop & other infrastructure outside the MLA	None

viii. Mining Plan details:

Mining Plan along with Progressive Mine Closure	Letter No.	IBM/GHY/AP/US/GRPT/MP-95
	Date	12.08.2021
	Mineral	Graphite

Plan approved by Indian Bureau of Mines (IBM)	Mine lease area	496 Ha
	Validity	2021-22 to 2025-26
Mining Parameters	Quantitative Description	
Method of Mining	Fully mechanized open cast mining method with formation of benches by drilling and blasting	
Total Mineable Reserves	29,29,424 Tonnes	
Life of mine	12 years (as per present reserve and resources and likely to be enhanced subject to the outcome of the proposed future exploration)	
Bench Height	5 m	
Bench Width	7.5 m	
Individual bench slope	70°	
Overall pit slope	28°	
Drilling/Blasting	Drilling will be carried out using 100 mm dia. Drill with 2 m burden & 3m spacing and 5.5 m. Approx. 29 number of holes will be required to be blasted per day. Emulsion/slurry explosive/ ammonium nitrate fuel oil mixture (ammonium nitrate: fuel oil = 94:6 by weight) may be used. Total 38,688 kg of explosive will be required per month.	
Dumpers capacity	20 tonne	
Transportation details	<p>Graphite ore within the mine lease area: through dumper of 20 t capacity.</p> <p>Sized Graphite Ore outside the mine lease area: through covered truck.</p> <p>The excavated waste and Graphite bearing material (GBM) will be transported to dump and stock yard respectively through trucks.</p>	
Mineral Processing	No mineral processing proposed, only five mobile crushers at pit mouth with capacity of 100 t/h each to crush the mineralized material to <80 mm size	
Waste Generation	PP submitted that the waste includes top soil, graphite bearing material, gneisses (calc gneiss, biotite gneiss, granite gneiss), calc silicate rock and quartzite. PP reported that it is estimated that around 32,016.91 cu.m of Topsoil, 35,543.38 cu.m. of Gneisses and Calcsilicate rock, 1,37,789.54 cu.m of graphite bearing material and 503.78 m ³ of quartzite will be generated during plan period.	
Waste Management	PP reported that the Topsoil will be reused for plantation purposes, immediately upon excavation. The entire quantity of quartzite and approx. 66% of excavated quantity of gneiss (calc gneiss, granite gneiss, biotite gneiss) and calc silicate rock would be utilized for road,	

	safety berm, retaining wall (protective measures) construction and all other infrastructure development. Rest approx. 34% of gneisses and calc silicate rock would be kept as dump. The graphite bearing material will be temporarily stocked in stockyard. Periodically, it would be analyzed from government laboratory and after analysis, the material having FC value $\geq 2\%$ (Threshold value) would be sold accordingly.
Working days	200 days/ year, 1 shift/day, 7 hours/shift

ix. Water requirement:

Total water requirement	274.0 KLD	Fresh water	274.0 KLD
		Treated water	-
Source	Subansiri River/ Ground water, with prior permission		
Permission	PP submitted that the permission will be obtained prior to mining operation		
Wastewater Generation	PP reported that 3.2 m ³ /day domestic waste water will be discharged via septic tank.		

x. Nearest village/town/ highway/railway station/water bodies:

Particulars	Particular's Name	Distance & Direction
Village	Taliha	Within the mine lease area
Town	Daporijo	44 km, South
Railway station	Silapathar	260 km, SE
Highway	NH-13	44 km, S
River	Subansiri River	Within the mine lease area

xi. Presence of Environmentally Sensitive areas in the study area:

Forest Land/Protected Area/Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter/Remarks
Forest Land	No	PP reported that there is no forest land involved in the mine lease area and the same has been confirmed by the DFO (Daporijo Forest Division) vide letter dated 25.06.2022.
National Park	No	
Wildlife Sanctuary	No	
Eco Sensitive Zone	No	

xii. Green belt/plantation details:

Proposed area for green belt/plantation	0.845 ha
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	7.59
50 m safety zone of nallah, roads, electric lines	69.1 ha for nalla.

	45 m wide safety zone along Road (excluding safety zone along ML boundary): 70.64 ha 60 m wide safety zone along River course (excluding safety zone along ML boundary): 29.57 Ha
Additional information (if any)	PP reported that approx. 125 trees to be cut and that the trees are of non-forestry species, and necessary permissions would be obtained, if required, since land is privately owned and is certified not to be a forest area.

xiii. Rehabilitation & Resettlement (R&R):

R & R details	PP submitted that there are three villages within the mine lease area with total of 2,389no.s people residing. However, as no settlement is going to be affected, so no rehabilitation and resettlement facility is anticipated.
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xiv. Court case details:

Court Case	Yes, a) Name of Court: Hon'ble High Court Gauhati b) Case no: WP(C)/1104/2022 The Project Proponent reported that there is a court case pending before the Hon'ble High Court Gauhati vide WP (C)/1104/2022 titled STHENOS CEMENT PRIVATE LIMITED and ANR, vs. the Union of India and 3 Ors. The petition challenges the revocation of the mining plan of Sthenos Cement Private limited by the regional Controller of Mines, Indian Bureau of Mines, Bhubaneswar. The Hon'ble High Court has on 08.03.2022 stayed the operation of the revocation of the approval of the Mining Plan. The said stay has been continued by subsequent orders dated 04.04.2022 26.04.2022 and 31.08.2022. The said stay order is valid and subsisting.
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xv. Details of Project Cost and Employment:

Particulars	(Rs. In Crore)
Project Cost	78.82 Crores
Employment	127 nos.

3. Observation and Recommendation of the EAC: -

The EAC noted that the Sub-Committee of the EAC visited the field during 7-13 April, 2023. The report of the subcommittee was placed before the EAC in its EAC meeting held during 3-4 May 2023 for due deliberations. The Project Proponent briefed about the key points and aspects covered during the site visit such as the proposed method of mining, dense vegetation covered in the mine lease area, topography of the mine lease area, land use pattern, Subansiri River, road, habitations, location of the crusher, dumping and the stock yard site and proposed mineral transportation route. After detailed deliberations, the EAC agreed to the recommendations of the report of the subcommittee. The Project Proponent informed the EAC that they will abide to the additional measures if any to be proposed by the EAC.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC **recommended** the proposal for grant of Terms of Reference (ToR) under the provisions of EIA Notification 2006 and its subsequent amendments, to M/s Sthenos Cement Private Limited for mining of Graphite in Taliha Graphite Deposit with proposed production capacity of 4,10,879 TPA (ROM) of Graphite, Topsoil: 82,201.99 TPA, OB/SB/IB: 3,58,926.45 TPA, Total Excavation: 8,52,007.4 TPA along with the setting up of three mobile crushers at pit mouth with capacity of 100 t/h each to crush the mineralized material to <80 mm size in the mine lease area of 496.0 Ha, located at Village Taliha, Tehsil Taliha, Upper Subansiri District, Arunachal Pradesh for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions applicable for non-coal mining projects:-

- i. Owing to the hilly terrain and steep slopes, the EAC opined that the Project Proponent needs to undertake land subsidence studies.
- ii. The EAC noted that the aerial distance between the proposed mine site to the nearest habitation is 250m and hence the Project Proponent should undertake vibration studies.
- iii. The Project Proponent needs to submit the map showing the mineral stack yard and the proposed waste dump to handle the mineral rejects only.
- iv. The Project Proponent needs to explore the possibility of using the dedicated road for transport of minerals within mine lease area.
- v. To maintain the pristine nature of the Hill and Subansiri River, the EAC opined that the PP should include provision for permanent sprinklers for the entire mineral transportation route as proposed in their mine plan. PP should submit the action plan and timeline to complete the same.

- vi. Since the dumping site is near to the river, the EAC suggested that Project Proponent should construct the dump in such a manner to ensure that mineral rejects are prevented from reaching the river during rainy season or in case of flood. All mitigative measures such as garland drainage, retaining wall and silt check dam should be constructed near the waste dump yard to prevent surface run off. Accordingly, the Project Proponent needs to submit the engineering design for construction of retaining wall, garland drains and silt check dam along with the timeline.
- vii. The Project Proponent needs to submit the ecology restoration plan.
- viii. The Project Proponent needs to submit the action plan for year wise waste backfilling.
- ix. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
- x. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air and noise pollution.
- xi. The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the centre on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road and the carrying capacity of the road.
- xii. The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
- xiii. The Project Proponent needs to submit the greenbelt/afforestation development plan for undertaking plantation in the periphery of the mine lease boundary, safety zone etc., The details of the no. of saplings proposed, type of species, spacing and

the area to be covered including the cost and timeline for completion of plantation needs to be provided in the EIA report.

- xiv. The Project Proponent needs to submit employment based skill development plan for the local people and thrust should be to provide employment to local people after imparting training.
- xv. The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.
- xvi. The instant ToR is subject to the outcome of the said court case i.e., WP(C)/1104/2022 before the Hon'ble High Court of Gauhati.

ADDITIONAL AGENDA:

1.6 Bauxite mining project of M/s Panditrao Mines and Minerals Private Limited with production capacity of 0.80 MTPA in the mine lease area of 90.0 ha, located at Village MincheBudruk, Taluka-Budhargarh, District-Kolhapur, Maharashtra – Environmental Clearance (EC) regarding

The instant proposal was submitted by the Project Proponent on 28.09.2006 under EIA 1994. The EIA Notification, 2006 was issued by the Ministry on 14.09.2006. To accommodate the new proposals received in accordance with EIA-1994 and submitted after 14.09.2006 but within 30.06.2007, the Ministry issued a circular on 13.10.2006 called "EIA Notification 14 September 2006- Interim Operational Guidelines till 13 September 2007 in respect of applications made under EIA-1994. The instant proposal was appraised as per these guidelines.

2. The Project Proponent submitted the proposal as per EIA-1994 for EC vide Form A wherein at serial number 3 (D), the Project Proponent mentioned that there were no National Park/Sanctuary/ Biosphere Reserve/ Monuments/ Heritage Sites/Reserve forests within 10 km from the mine sites. But, the Radhangari Wildlife Sanctuary was notified on 16.09.1985 and it was located at a distance of 3.8 km from the mine site. At the time of submission of application for EC, the Project Proponent concealed this information.

3. Based on the submissions of the Project Proponent, the instant project was considered during 5th EAC Meeting held during January 19-20, 2007 wherein the EAC recommended the instant proposal. As per the recommendation of EAC, the Ministry granted the EC on 13.03.2007 under EIA-2006.

4. In the meanwhile, prior to issue of EC, Hon'ble Supreme Court in its order dated 04.08.2006 in IA No.1000 of WP © 202 of 1995 (T N Godavaraman vs Union of India) prohibited the mining activity around protected area and as an interim measure directed that 1 km safety zone shall be maintained subject to the order that may be made in this IA regarding Jamua Ramgarh Sanctuary. Further on 04.12.2006, the Hon'ble Supreme Court in WP (C) 460 of 2004 *inter-alia* directed as under: -

"The MoEF would also refer to the Standing Committee of NBWL for Wildlife under Section 5 (b) and 5 (c)(ii) of the Wildlife (Protection) Act, the cases where environment clearance has already been granted where activities are within 10 km zone".

5. Pursuant to the direction of Hon'ble Supreme Court, the Ministry issued a circular dated 27.02.2007 wherein it was mentioned that activities falling within 10 km radius of Wildlife Sanctuary and/or National Parks and which have been recommended for Environmental Clearance by respective EAC shall be accorded EC subject to their Project Proponent obtaining clearance under the Wildlife (Protection) Act 1972, a condition to this effect being stipulated in EC letter.

6. The Ministry issued an OM dated 2nd December 2009 enumerating the procedure for consideration of environmental clearance under EIA 2006 which involve forest land and or wildlife habitat. A newspaper advertisement was also released by the Ministry on 01.01.2009 requesting all Project Proponents to obtain clearance from NBWL if their project site lies within 10 km from protected areas. The Project Proponents were requested to submit their application to NBWL within 31.01.2009 with a copy to Ministry.

7. Further, as per direction of Hon'ble Supreme Court a team was constituted by the Ministry to visit the mine site of M/s Punthembekar minerals Pvt. Ltd during October 2017. The aforesaid committee submitted its report in the Ministry wherein after examination it was found out the M/s Panditrao Mines and Minerals Pvt Ltd was located within 10 km from connecting corridor of Chandoli National Park and Radhanagari Wildlife sanctuary.

8. The Ministry then issued a notice to M/s Panditrao Mines & Minerals Pvt. Ltd under Section 5 of Environment (Protection) Act, 1986 on 15.03.2018. The Project Proponent replied vide letter dated 28.03.2018, 30.10.2018 and the reply was examined by the Ministry and it was found that project lies within 10 km radius of Radhanagari Wildlife Sanctuary and was operating without obtaining NBWL clearance. The EC of the project was then kept in abeyance by the Ministry vide letter dated 02.11.2018.

9. Thereafter, the Project Proponent initiated the process for NBWL clearance. While availing of clearance under NBWL was in progress, the ESZ boundary of the Radhanagari WLS was notified on 15th October, 2020. Thus on final notification of Radhanagari WLS,

ESZ, the condition of 10 km became null and void. The Mining lease is at distance of 3.8 km from Radhanagari Wildlife Sanctuary. Based on above notification, the Project Proponent requested Ministry on 12.11.2020 to remove the abeyance and the matter was referred to ESZ Division in the Ministry.

10. The ESZ Division upon examination of KML file stated the following: -

“4. As per the record, the Final Eco-sensitive Zone (ESZ) notification of Radhanagiri Wildlife Sanctuary, Maharashtra was published vide S.O. 3630(E) 15th October, 2020. The extent of ESZ varies from 200 metres to 6.01 kilometres from the boundary of Radhanagiri Wildlife Sanctuary and has total ESZ area of 250.66 Sq km.

5. Upon examination by superimposing the project location shared by IA-II with georeferenced map in Final ESZ Notification, it appears that the project location is 0 (zero) kilometers far from ESZ boundary of Radhanagiri Wildlife Sanctuary.

6. Furthermore, the project location was examined vis-à-vis Western Ghats ESA, the project site appears to be within the area recommended by High Level Working Group (HLWG). Therefore, the project site may be in purview of the extant Statutory Direction on Western Ghats vide F. No. 1-4/2012 - RE (Pt.) dated 13.11.2013 of the Ministry of Environment and subsequent amendment F. No. 1/9/2018-ESZ dated 03.12.2018.”

11. The Ministry vide its letter dated 11.10.2021 requested the proponent to furnish the certificate from State Chief Wildlife Warden, Maharashtra regarding location of mine site in question based on the final ESZ notification of Radhanagari Wildlife Sanctuary and certified copy of translated version of DCF letter along with location of the project vis-a-vis the boundaries of draft Environmental Site Assessment (ESA) map duly certified by the competent authority, for further action by Ministry. Accordingly, e-mail dated 26.03.2022 with attachment was received from the proponent containing the following.

- The location of project is outside the boundary of finally notified Eco-Sensitive Zone of Radhanagari Wildlife Sanctuary.
- Translated version of the letter issued by the Deputy Conservator of Forests, Kolhapur Forest Division, Kolhapur letter No.OW.NO.B/Survey/41/2020-21 dated 05/04/2021.

- Location map on scale 1:50,000 certified by Chief Conservator of Forest (Territorial), Kolhapur and Deputy Conservator of Forests, Kolhapur Forest Division, Kolhapur.
- Village MincheBudruk, Taluka Bhudargad, District Kolhapur is not included in Western Ghat Eco-Sensitive Area as per draft notification dated 03/10//2018 issued by the Ministry of Environment, Forests and Climate Change.

12. Since the observation of ESZ Division and letter of PCCF &CWLW were different, the Ministry vide letter dated 04.04.2022 requested the officials of IRO Nagpur along with the officials of the State Forest Department to visit the site and furnish the joint report/ground truthing for further action by this Ministry.

13. The IRO Nagpur provided its report vide letter dated 17.08.2022. The site inspection was carried out on 29.06.2022 and during the site inspection, the Committee observed the following: -

- a. As per the Fourth Draft ESA notification (dated 03.10.2018) of Western Ghats, the village MincheBudruk, (in which the Panditrao mine block is located) does not fall under the proposed ESA of Western Ghats.
- b. Nearest ESA Village to MincheBudruk (where mine is located) as per 4th draft of ESA notification is 'Aini' village, whose boundary is at 0.00 m distance from OPS coordinates BP-14, BP-15 to BP-I of mining block.
- c. The committee also perused the village maps of Aini and Dhamanwadi. Upon perusal, it was observed that the survey numbers of Aini and Dhamanwadi villages adjacent to MincheBudruk village are different than survey numbers falling within the said Bauxite mining Block.
- d. As per the village plan of MincheBudruk village, all survey numbers as mentioned in the application of the said Bauxite mining Block, fall in MincheBudruk village.
- e. Based on the observation made as above, Village maps of Minch Budruk, Aini and Dhamnvadi villages and DGPS map, the Committee observed that the location of mining project is at 0.00 m distance from the draft western ghat ESA and entire mining bauxite block falls in Minchebudruk village which is not included in the ESA of Western Ghats.

14. The IRO Nagpur was again requested on 27.10.2022 to clearly state the following:
-Shortest distance between the mine site and Radhanagari Wild Life Sanctuary, Shortest distance between the mine site and ESZ of Radhanagari Wild Life Sanctuary and Whether the mine site is falling in ESZ of Radhanagari WLS or not. The IRO Nagpur vide letter dated 05.12.2022 has stated the following: -

- Shortest distance between the mine site and Radhanagari Wild Life Sanctuary is 3.8 km as per the authenticated map prepared and signed by Forest Surveyor, Kolhapur Forest Division, Kolhapur.
- Shortest distance between the mine site and ESZ of Radhanagari Wild Life Sanctuary is 0.00 m. Also it is to be notified that boundary of the ESZ is boundary of the village Ainee in Radhanagari Taluka and Mining site is in adjoining village Minche Bk in Bhudargad Taluka in Kolhapur district.
- Thus the village Minche Bk in Bhudargad Taluka in Kolhapur district does not fall in Radhanagari WLS ESZ as per the Radhanagari WLS ESZ map as notified and authenticated by Dy CF Kolhapur.

15. However, Project Proponent while obtaining the EC in 2007 did not give the information that the mine site is located within 10 km boundary of Radhanagari Wildlife Sanctuary instead in their application they submitted that no wildlife sanctuary/park within 10 km radius of mine site.

16. In view of the above, the Ministry issued the Show Cause Notice to the Project Proponent on 06.03.2023 under Section 5 of Environment (Protection) Act, 1986 for concealment of information in Form A with reference to the Bauxite mining project of M/s Panditrao Mines and Minerals Private Limited with production capacity of 0.80 MTPA in the mine lease area of 90.0 ha, located at Village MincheBudruk, Taluka-Budhargarh, District-Kolhapur, Maharashtra.

17. The Project Proponent replied to the Show Cause Notice on 21.03.2023 and the Project Proponent has admitted that the Consultant (M/s Bhagavathi Ana Labs Ltd) has inadvertently missed to mention the distance of nearest National Park/Sanctuary from the mining site. Further, the Project Proponent requested for an opportunity for hearing to explain the details in person.

18. In view of the above, the Project Proponent was given an opportunity to participate and explain the details in the 14th EAC (Non-Coal Mining) meeting held on 3-4 May, 2023 through Video Conference (VC). A meeting notice was issued to the Project Proponent on 24.04.2023 to participate in the EAC meeting and also requested to provide the chronological sequence of grant of EC for the Mining Operation and the applicable provisions of ESZ Notification (Distance of Mines from the Protected Areas and the Actual Distance of the Mine from the Protected Areas) in the tabular form. Accordingly, the proposal was considered in the 14th EAC (Non-Coal Mining) held during 3-4 May, 2023 for due deliberations.

19. Observation and Recommendation of the EAC: -

The EAC noted that as per the request of the Project Proponent letter dated 21.03.2023, the instant proposal was considered before the EAC. The Project Proponent gave the technical presentation with chronology of events. the chronological sequence of grant of EC for the Mining Operation and the applicable provisions of ESZ Notification (Distance of Mines from the Protected Areas and the Actual Distance of the Mine from the Protected Areas) are given in the tabular form.

S. No	Chronology of Events	Date
1	Notification of Radhangari Wildlife Sanctuary and the Sanctuary was located at a distance of 3.8 km from the mine site.	16.09.1985
2	The Project Proponent submitted the proposal for Environmental Clearance under EIA 1994 The Project Proponent submitted the proposal as per EIA-1994 for EC vide FormA wherein at serial number 3 (D), the Project Proponent mentioned that there were no National Park/Sanctuary/ Biosphere Reserve/ Monuments/ Heritage Sites/Reserve forests within 10 km from the mine site. At the time of submission of application for EC, the Project Proponent has concealed this information.	28.09.2006
3	EIA Notification, 2006 vide S.O. 1533(E)	14.09.2006
4	The Ministry issued a circular called "EIA Notification 14 September 2006- Interim Operational Guidelines till 13 September 2007 in respect of applications made under EIA-1994.	13.10.2006
5	The proposal was considered in the 5 th EAC Meeting and the EAC recommended the instant proposal.	January 19-20, 2007
6	As per the recommendation of EAC, the Ministry granted the EC under EIA-2006.	13.03.2007
7	A newspaper advertisement was released by the Ministry requesting all Project Proponents to obtain clearance from NBWL if their project site lies within 10 km from protected areas. The Project Proponents were requested to submit their application to NBWL within 31.01.2009 with a copy to Ministry.	01.01.2009
8	The Ministry issued an OM regarding the procedure for consideration of environmental clearance under EIA 2006 which involve forest land and or wildlife habitat.	02.12.2009

9	As per the direction of Hon'ble Supreme Court a team was constituted by the Ministry to visit the mine site of M/s Punthembekar minerals Pvt. Ltd. The aforesaid committee submitted its report in the Ministry wherein after examination it was found out the Panditrao Mines and Minerals Pvt Ltd is located within 10 km from connecting corridor of Chandoli National Park and Radhanagari Wildlife sanctuary.	October 10-11, 2017
10	The Ministry issued show cause notice to M/s Panditrao Mines & Minerals Pvt. Ltd under Section 5 of Environment (Protection) Act, 1986	15.03.2018
11	The Project Proponent replied vide letters dated 28.03.2018, 30.10.2018 and the reply was examined by the Ministry and it was found that project lies within 10 km radius of Radhanagari Wildlife Sanctuary and was operating without obtaining NBWL clearance.	28.03.2018 & 30.10.2018
12	EC was then kept in abeyance by the Ministry	02.11.2018
13	Final Notification of the ESZ boundary of the Radhanagari WLS Thus on final notification of Radhanagari WLS, ESZ, the condition of 10 km became null and void. The mine lease is located at distance of 3.8 km from Radhanagari Wildlife Sanctuary.	15.10.2020
14	The Project Proponent requested the Ministry to remove the abeyance.	12.11.2020
15	The matter was referred to ESZ Division of the Ministry	18.01.2021
16	The ESZ Division gave the comments stating that <i>As per the record, the Final Eco-sensitive Zone (ESZ) notification of Radhanagiri Wildlife Sanctuary, Maharashtra was published vide S.O. 3630(E) 15th October, 2020. The extent of ESZ varies from 200 metres to 6.01 kilometres from the boundary of Radhanagiri Wildlife Sanctuary and has total ESZ area of 250.66 Sq km.</i> <i>Upon examination by superimposing the project location shared by IA-II with georeferenced map in Final ESZ Notification, it appears that the project location is 0 (zero) kilometers far from ESZ boundary of Radhanagiri Wildlife Sanctuary.</i> <i>Furthermore, the project location was examined vis-à-vis Western Ghats ESA, the project site appears to be within the area recommended by High Level Working Group (HLWG). Therefore, the project site may in purview of the extant Statutory</i>	10.02.2021

	<i>Direction on Western Ghats vide F. No. 1-4/2012 - RE (Pt.) dated 13.11.2013 of the Ministry of Environment and subsequent amendment F. No. 1/9/2018-ESZ dated 03.12.2018.”</i>	
17	The Ministry requested the Project Proponent to furnish the certificate from State Chief Wildlife Warden, Maharashtra regarding location of mine site in question based on the final ESZ notification of Radhanagari Wildlife Sanctuary and certified copy of translated version of DCF letter along with location of the project vis-a-vis the boundaries of draft Environmental Site Assessment (ESA) map duly certified by the competent authority.	11.10.2021
18	The Project Proponent submitted the information as given below:- <ul style="list-style-type: none"> • The location of project is outside the boundary of finally notified Eco-Sensitive Zone of Radhanagari Wildlife Sanctuary. • Translated version of the letter issued by the Deputy Conservator of Forests, Kolhapur Forest Division, Kolhapur letter No.OW.NO.B/Survey/41/2020-21 dated 05/04/2021. • Location map on scale 1:50,000 certified by Chief Conservator of Forest (Territorial), Kolhapur and Deputy Conservator of Forests, Kolhapur Forest Division, Kolhapur. • Village Minche Budruk, Taluka Bhudargad, District Kolhapur is not included in Western Ghat Eco-Sensitive Area as per draft notification dated 03/10//2018 issued by the Ministry of Environment, Forests and Climate Change. 	26.03.2022
19	Since the observation of ESZ Division and letter of PCCF & CWLW were different, the Ministry requested the officials of IRO Nagpur along with the officials of the State Forest Department to visit the site and furnish the joint report/ground truthing for further action by this Ministry.	04.04.2022
20	The IRO, Nagpur submitted their report to the Ministry. The site inspection was carried out on 29.06.2022. It was informed that the location of mining project is at 0.00 m distance from the draft western ghat ESA and entire mining bauxite block falls in Minche budruk village which is not included in the ESA of Western Ghats.	17.08.2022

21	The Ministry again requested the IRO, Nagpur to clearly state the Shortest distance between the mine site and Radhanagari Wild Life Sanctuary and its Eco Sensitive Zone (ESZ).	27.10.2022
22	The IRO, Nagpur has stated the following: - <ul style="list-style-type: none"> • Shortest distance between the mine site and Radhanagari Wild Life Sanctuary is 3.8 km as per the authenticated map prepared and signed by Forest Surveyor, Kolhapur Forest Division, Kolhapur. • Shortest distance between the mine site and ESZ of Radhanagari Wild Life Sanctuary is 0.00 m. Also it is to be notified that boundary of the ESZ is boundary of the village Ainee in Radhanagari Taluka and Mining site is in adjoining village Minche Bk in Bhudargad Taluka in Kolhapur district. • Thus the village Minche Bk in Bhudargad Taluka in Kolhapur district does not fall in Radhanagari WLS ESZ as per the Radhanagari WLS ESZ map as notified and authenticated by Dy CF Kolhapur. 	05.12.2022
23	The Ministry issued the Show Cause Notice to the Project Proponent under Section 5 of Environment (Protection) Act, 1986 for concealment of information in Form A	06.03.2023
24	The Project Proponent replied to the Show Cause Notice and the Project Proponent has admitted that the Consultant (M/s Bhagavathi Ana Labs Ltd) has inadvertently missed to mention the distance of nearest National Park/Sanctuary from the mining site. Further, the Project Proponent requested for an opportunity for hearing to explain the details in person.	21.03.2023
25	Accordingly, the proposal was placed in the 14 th EAC (Non-Coal Mining) meeting held during 3-4 May, 2023 for due deliberations	03.05.2023

Further, the Project Proponent has informed that there is no specific distance defined by the State of Maharashtra and the same was at under process which was missed inadvertently in Form-A by the consultant. The Project Proponent also informed the EAC that due to halt of mining operations, the proponent and the employee suffers a lot and requested the EAC to revoke the abeyance order.

After detailed deliberations, the EAC noted that the EC for the instant project was already kept in abeyance w.e.f 02.11.2018 as the Project Proponent operated the mine without obtaining Clearance from the Standing Committee of National Board of Wildlife. The EAC observed that the Project Proponent has accepted that in Form A, it was

inadvertently missed to mention the distance of nearest National Park/Sanctuary from the mining site. The EAC observed that the Project Proponent has concealed the information in Form A as per EIA-1994. The EAC reiterated the provisions of Clause 8 (vi) of EIA Notification, 2006, that *“Deliberate concealment and/or submission of false or misleading information or data which is material to screening or scoping or appraisal or decision on the application shall make the application liable for rejection, and cancellation of prior environmental clearance granted on that basis. Rejection of an application or cancellation of a prior environmental clearance already granted, on such ground, shall be decided by the regulatory authority, after giving a personal hearing to the applicant, and following the principles of natural justice”*. Thus, the EAC opined that the Ministry may revoke the Environmental Clearance (EC) granted by the Ministry vide EC letter dated 13.03.2007 for concealment of information. The EAC also opined that the Project Proponent may submit the fresh proposal for Terms of Reference under Ministry’s SOP dated 07.07.2021 and shall start the process de-novo after the revocation of EC by the Ministry.

Day 2: 4th May, 2023 (Thursday)

2.1 Expansion of Sanu-II Limestone Mining Project (M.L. No. 01/1997) of M/s Rajasthan State Mines & Minerals Limited, with Mine Material handling capacity from existing 2.73 MTPA to 10.23 MTPA which includes ROM SMS grade Limestone resource- 2.73 MTPA, Cement Grade Limestone resource-5 MTPA & recovery of mineral from Handling of old backfilled limestone size reject dumps (0-30 mm size)-2.5 MTPA along with Crushing (1X300TPH &1X200 TPH) &Screening plants (4X250 TPH) in the mine lease area of 998.4 ha., located Near Village Joga&Sanu, Sub Tehsil-Ramgarh, Tehsil-Sam (Old Tehsil-Jaisalmer), District Jaisalmer, Rajasthan- [F.No: J-11015/43/2006-IA.II(M), Proposal No: IA/RJ/MIN/424348/2023; Consultant: M/s Fulgro Environmental &Engg Services India Pvt. Ltd.] - Terms of Reference (Expansion)

The instant proposal is for Terms of Reference of M/s Rajasthan State Mines & Minerals Limited for mining of Limestone in Sanu-II Limestone Mining Project (M.L. No. 01/1997) with Mine Material handling capacity from existing 2.73 MTPA to 10.23 MTPA which includes ROM SMS grade Limestone resource- 2.73 MTPA, Cement Grade Limestone resource-5 MTPA & recovery of mineral from Handling of old backfilled limestone size reject dumps (0-30 mm size)-2.5 MTPA along with Crushing (1X300TPH & 1X200 TPH) & Screening plants (4X250 TPH) in the mine lease area of 998.4 ha., located Near Village Joga&Sanu, Sub Tehsil-Ramgarh, Tehsil-Sam (Old Tehsil-Jaisalmer), District Jaisalmer, Rajasthan.

2. The details of the project as ascertained from the document submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

- i. The mine lease area is located between Latitude: 27°16'44.55766"N to 27°16'43.80141" N and Longitude: 70°33'47.34792"E to 70°34'54.61613" E. The mine lease area falls under the Survey of India Toposheet No. 40I/11 and falls in Seismic Zone III.
- ii. The proposed project activity is listed at Schedule no. 1(a) Mining of Minerals of the schedule of the EIA Notification, 2006 and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.
- iii. Details of previous Environmental Clearance (EC):
 - a) The Project Proponent has submitted that initially EC was obtained vide letter No. J-11015/111/94-IA.II (M) dated 16th May 1995 in favor of M/s Rajasthan State Mines & Mineral Ltd.
 - b) Then, the Project Proponent obtained EC vide letter No. J-11015/43/2006-IA.II (M) dated 6th August 2007 for an annual production capacity of 1.25 MTPA of steel grade Limestone over an area of 998.4 ha in favor of M/s Rajasthan State Mines & Minerals Ltd.
 - c) Thereafter, the Project Proponent obtained amendment in EC vide F. No. J-11015/43/2006-IA.II(M)(Pt.) dated 16th March 2020 that the validity of EC dated 06.08.2007 stands extended till validity of mining lease i.e., 31.03.2027.
 - d) Further, the Project Proponent obtained another amendment in EC on 01.03.2021 wherein EC dated 06.08.2007 was amended for inclusion of ROM Limestone @ 2.73 MTPA on existing Production capacity of Steel Grade Limestone @ 1.25 MTPA and removal of old subgrade limestone fines from already backfilled area.

iv. Details of Mine Lease:

S. no	Prospecting License/Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/Minor)	Period of Grant	Granted by	Mine lease area in Ha
1.	Government of Rajasthan Order no.P.1(55)Khan/G r-I/88 dated 5 th June 1998	05.06.1998	Limestone (Steel Grade as well as Cement Grade), Major	01.04.1997 to 31.03.2027	Govt. of Rajasthan	998.40
2.	क्रमांकखअ/जैसल/सी सी/प्रधान/एम. एल.1 /1997/836	12.02.2015	Limestone (Steel Grade as well as Cement Grade), Major	12.02.2015 to 31.03.2047	Govt. of Rajasthan	998.40

v. Details of Mine Lease Deed execution:

S. No	Details of grant of Mine Lease deed execution	Period of Grant		Name of the Mineral	Mine lease area in Ha
		From	To		
1	Deed execution no. AME/JSM/CC(1)/ML/1/97 dated 25 th August 1998	01/04/1997	31/03/2027	Steel grade & Cement Grade Limestone	998.40
2	15.11.2018 (Rider Agreement)	12/02/2015	31/03/2047	Steel grade & Cement Grade Limestone	998.40

vi. Land Use/Land Cover of the Mine Lease Area:

Pvt. Barani land	13.94 Ha
Govt. Waste land	984.46 Ha
Forest land	Nil
Total Mining lease area (MLA), ha	998.4 Ha.
Private land for crusher, workshop & other infrastructure outside the MLA	No

vii. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/DMG)	Letter No.	584(4) (3)(1923)/2022-RCOM-AJM
	Date	20/03/2023
	Mineral & (Major/Minor)	Limestone (Steel Grade & Cement Grade), Major Mineral
	Mine Lease Area, Ha	998.4 Ha.
	Validity	2023-24 to 2027-28
Mining Parameters	Quantitative Description	
Method of Mining	Open cast Mechanized	
Drilling/Blasting	Drilling/Blasting/Surface mining	
Geological Reserves	239.66042 MT (Million Tonne)	
Mineable Reserves	162.376239 MT (Million Tonne)	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mine ral Rejects/ Waste, MTPA)	Total Material handing 10.23 Million TPA (Total Excavation- 7.73 MTPA & old backfilled limestone size reject dumps (0-30 mm size)-2.5 MTPA)	

S.No.	Product	Existing Capacity as per EC (MTPA)	Proposed Capacity (MTPA)	Remark/End use
1	SMS Grade Limestone (30 to 80 mm particle size)	1.25	1.375	End use: Steel industries As per mining plan Variation of (+-10 %) possible however S.N. 1, 2a,2b altogether will not exceed 2.73 MILLION TPA
2	2a Mineral Size Reject (10 mm-30 mm)	1.48	0.78716	End use: cement, power & other industries As per mining plan Variation of (+-10 %) possible however S.N. 1, 2a,2b altogether will not exceed 2.73 MILLION TPA
	2b Screen Reject Limestone less than 10 mm particle size)		0.84084	End use: Market is yet to be established. As per mining plan Variation of (+-10 %) possible however S.N. 1, 2a,2b altogether will not exceed 2.73 MILLION TPA
	2c Recovery of mineral from handling of old backfilled limestone size reject dumps		**	Included in S.N. 6**
3 (1+2)	ROM (Limestone Resources)	2.73*	2.73	*This includes Recovery of mineral from handling of

					backfilled limestone
	4	Cement Grade Limestone Resources (0-300 mm)	NIL	5.0	End use: Cement, Power & Other industries
	5 (3+4)	ROM (SMS grade & Cement Grade Limestone resource)	2.73	7.73	
6	6.1	Size mineral rejects (10-30 mm size)		0.9086	End use: cement, steel, power plants & other industries As per mining plan Variation of (+-10 %) possible however S.N. 6.1 & 6.2 altogether will not exceed 2.5 MILLION TPA
	6.2	Reject (0-10 mm Size)			End use: backfilled or dispatch subject to Market demand As per mining plan Variation of (+-10 %) possible however S.N. 6.1 & 6.2 altogether will not exceed 2.5 MILLION TPA
	6.0 (6.1+6.2)	Handling of old backfilled limestone size reject dumps (0-30 mm size)	Inclusive in ROM Limestone*	2.5	End use: cement, steel, power plants & other industries
	7(5+6)	Total Material Handling (MILLION TPA)	2.73	10.23	
Crusher & vibrating screen will be sizing and segregation of material in different sizes Surface miner if feasible will also be used in the mining					
Life of mine	30.29 Years from 1 st April 2023				

Mine Bench Height & Bench Width	6 m
No. of Mine Benches	12 m
Existing Depth, m bgl	6 m
Ultimate Depth of Mining, m bgl	34 mbgl
Ground Water Table, m bgl	70 m bgl
Details of ground water intersection	Ground water table will not be intersected
Individual bench slope	75°
Overall pit slope	45°
Details of existing/proposed Crusher	Existing Primary and Secondary Jaw Crushers having capacity 1X300TPH, 1X200TPH
Mineral Beneficiation	No
RoM output size	Crushed and Screened Steel Grade- 30-80 mm, Size rejects: 10-30 mm, Mineral Reject: -10 MM Cement Grade 0-300 mm
Transportation details including capacity of dumper/tipper, mode of transport and distance	Via roads/railways and Capacity of dumpers/Tippers-25 Tonnes
Generation of Topsoil/OB & its Management during plan period & conceptual period	There is no top soil generation/OB generation is envisaged from the proposed mines
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	Mineral Reject generation of Size less than 10 mm & as per market specifications possibility is to explore the same for market use and selling of -10mm mineral sized rejects with the objective to zero waste mining as per National Mineral Policy 2019 to Conserve National Resources as much as possible.

viii. Water requirement:

Total water requirement	55.0 KLD	Drinking & Domestic	30.0 KLD
		Plantation, Dust suppression, Crusher operation	25.0 KLD
Source	Water demand is being met through IGNP Canal		
Permission for withdrawal/intersection along with details of grant and its validity	Permission obtained from IGNP dated 06/02/2007 for 120 KLD for Sanu-I and Sanu-II mining project.		

ix. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest:

Particulars	Particular's Name	Distance & Directions
Village	Joga village	~ 4.00 km, NE
Town	Ramgarh	~10.86 km, NW
Highway	NH-68	~Passing through the mine lease area at about 0.93 km towards South direction from the Pillar O of the M.L area.
Interstate Boundary	None in 10 km radius	
Railway Station/Railway line	Sanu Railway station	~ 5.58 km, SE
Water Bodies	SanwraDesarTalab	~1.37 km, SE
Forest	None in 10 km radius	

x. Presence of Environmentally Sensitive areas in the study area:'

Forest Land/Protected Area/Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	Certified by Forest department vide letter dated 11.09.2020 -----
National Park	No	
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	No	Details will be submitted with Final EIA/EMP submission.
Wildlife Conservation Plan	If Schedule-I species is found then Wild life conservation plan will be prepared accordingly.	

xi. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	Land use Category	Present as on 01.04.2023 (Ha)	End of 5 th year (Ha) as on 31.03.2028	End of mine (Ha)	Total nos of sapling proposed
	Others to specify (Rehabilitated with plantation)	161.10	39.73	327.91	327910
	Plantation along both sides of NH	5.44	11.19	11.19	11190

	passing through the mine & mines office area				
	Plantation along statutory barrier zone	0.53	15.21	15.21	15210
Budget for green plant & plantation till the end of life of mine.	Will be submitted with Final EIA/EMP submission.				
Particulars for Green belt/plantation	Area covered (in Ha)				
7.5 m barrier & non-mineralized zone	15.21 ha.				
50 m safety zone of nallah, roads, electric lines	11.19 ha.				

xii. Details of CTE/CTO, Certified Compliance Report, and Certified Production Details from the inception of the mine:

Particulars	Details of Letter along with date of grant and validity		
Consent to Establish (CTE)	F(Mines)/Jaisalmer(Jaisalmer)/2068(1)/2021-2022/215-219 dated 12.05.2021 valid till 31/07/2024		
Consent to Operate (CTO)	CTO issued by the Rajasthan State Pollution Control Board vide Lr No: F(Mines)/Jaisalmer(Jaisalmer)/2068(1)/2021-2022/220-224 dated 12.05.2021 for mining of Limestone (ROM): 2.7300 MTPA and is valid till 31/07/2024		
Certified Compliance Report and Inspection date	At the time of EIA/EMP Report submission Certified compliance report will be submitted		
Certified Production Details from the inception of the mine (in tabular form against the EC capacity)	The Project Proponent has submitted the certified past production details by DMG, Jaisalmer vide letters dated 15.03.2016, 17.01.2018 & 15.03.2019 for the period 1997-98 to 2018-19. Certified Production figure along with EC Capacity		
	Year	EC Capacity (TPA) **As per Approved Mining plan form 1997-98 to 06.08.2007 then Capacity of EC been mentioned	Certified Production Details, Tonnes
	1997-98	600000	574674
	1998-99	600000	511978
	1999-2000	600000	448559
	2000-01	600000	589564

	2001-02	600000	597430
	2002-03	1000000	580515
	2003-04	1000000	592468
	2004-05	1000000	598637
	2005-06	1000000	589994
	2006-07	1000000	868353
	2007-08	1250000	778921
	2008-09	1250000	881300
	2009-10	1250000	813005
	2010-11	1250000	746978
	2011-12	1250000	1210126
	2012-13	1250000	926496
	2013-14	1250000	868928
	2014-15	1250000	972054
	2015-16	1250000	956879
	2016-17	1250000	626746
	2017-18	1250000	1249476.89
	2018-19	1250000	1215482.05
	2019-20	1250000	1136929.12
	2020-21	1250000	1078163.78
	2021-22	2730000	2681733
	2022-23	2730000	2335669
Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent submitted the undertaking by way of Affidavit in a non-judicial stamp paper of Rs 100 bearing no: BK 435763 dated 22.04.2023 stating that they will comply with all the statutory requirement & judgment of Hon'ble Supreme Court dated 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India &Ors.		

xiii. Rehabilitation & Resettlement (R&R):

R & R details	This is an existing mine and R&R is not applicable
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xiv. Court case details:

Court Case, No and its present status	The Project Proponent submitted the undertaking by way of Affidavit in a non-judicial stamp paper of Rs 100 bearing no: BK 435763 dated 22.04.2023 stating that there is no litigation pending against the said project in any court.
Undertaking by Project Proponent w.r.t court case	

xv. Details of project cost and employment:

Project Cost	Rs16.15 Crore
Employment (No.s)	168 (62 Permanent and 106 Contractual)

3. Observation and Recommendation of the EAC: -

The Project Proponent informed the EAC that initially EC was obtained vide EC letter dated 16th May 1995 and then vide EC letter dated 6th August 2007 for an annual production capacity of 1.25 MTPA of steel grade Limestone over an area of 998.4 ha in favor of M/s Rajasthan State Mines & Minerals Ltd. Due to change in market scenario and market demand, the instant proposal for expansion in Terms of Reference was submitted. Then the Project Proponent/Consultant presented the KML file to indicate the site features in the vicinity of the mine lease area and in the study area of 10 km radius. The Project Proponent informed the EAC that the mine is in operation from the year 1997. The EAC on viewing the KML file noted that there is a lack of greenbelt development in the mine lease area. The EAC also observed that the survival rate is less. Nearest village is Joga village located at a distance of ~ 4.0 km, NE. Ramgarh Power Station is located at a distance of 4.0 km, NW from the mine lease area. No Forest, National Park and Wildlife Sanctuary is located within the 10 km radius of the study area. The EAC asked the Project Proponent whether transmission lines and seasonal nallahs are passing within the mine lease area or not. The Project Proponent informed the EAC that there is no transmission line passing within the mine lease area. A seasonal nallah exists within the northern part of the mine lease area. The Project Proponent also informed the EAC that there is no school located within the mine lease area and schools are located in the nearby villages.

The EAC asked about the details of the Schedule-I species in the study area and Wildlife Conservation Plan. The Project Proponent informed the EAC that Peafowl is the Schedule-I species in the study area and Chinkara is found at a distance of about 40km from the mine lease area. The EAC asked about the presence of Great Indian Bustard (GIB) in the study area. The Project Proponent informed the EAC that GIB is found at a distance of about 80km from the mine lease area. The EAC was of the view that the study area is the potential habitats of GIB. The Project Proponent/Consultant informed the EAC that the instant study area is not a potential habitats of GIB. The EAC asked the Project Proponent/Consultant to refer the order of the Hon'ble Supreme Court dated 19.04.2021 in I.A. No.85618 of 2020 in Writ Petition (Civil) No.838 of 2019 in the matter of M.K. Ranjitsinh & Ors. Versus Union of India & Ors w.r.t transmission lines.

The Project Proponent informed the EAC that the instant mine lease is valid up to 31.03.2047. Mining Plan was approved by IBM vide letter dated 20.03.2023 for mining of Limestone (Steel Grade & Cement Grade) for the period up to 2023-24 to 2027-28. The Project Proponent has shown the certified past production details from the year 1997-98 to 2022-23. The Project Proponent informed the EAC that the maximum production was achieved during the year 2021-22 i.e., 2.68 MTPA against the EC capacity of 2.73 MTPA. The EAC asked the Project Proponent to revise the flow sheet of the sizing & screening plant by incorporating the material balance. The Project Proponent informed the EAC that selling of -10mm mineral rejects will be explored to zero waste mining as per National Mineral Policy 2019.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC noted that the mine is in operation from the year 1997. The EAC was of the view that there is a lack of greenbelt development in the mine lease area and the survival rate of the greenbelt/plantation is less. The EAC also observed that the Project Proponent has not submitted the compliance of the last certified compliance report. The EAC opined that there is need to ascertain the development of green belt/plantation as on date with supporting documents/photographs/videos. The EAC was of the view that since this is an existing mine, the Project Proponent needs to submit the details of the Schedule-I species and the status of the Wildlife Conservation Plan. The EAC opined that the Project Proponent needs to submit the letter from the Forest Dept. clarifying whether the instant proposal falls under priority GIB area or not in reference to the order of the Hon'ble Supreme Court dated 19.04.2021. Based on the above discussions held, the EAC **deferred** the proposal for want of following additional information: -

- i. The Project Proponent needs to verify with the KML file and report prepared by the Wildlife Institute of India (WII) whether that the instant proposal falls under the priority GIB area or not in reference to the order of the Hon'ble Supreme Court dated 19.04.2021. The same should be vetted by the State Forest Department along with the authenticated map. Ministry may also seek comments from WL Division in the matter.
- ii. The EAC noted that there is a lack of greenbelt development/plantation in the mine lease area and the survival rate is less. The Project Proponent needs to submit the details of the area covered under greenbelt/plantation, no. of saplings planted, type of species planted and its survival rate as on date. PP should also provide the details of the budget spent towards the same. The same should be authenticated with supporting documents/photographs/videos.
- iii. The EAC was of the view that since this is an existing mine, the Project Proponent needs to submit the details of the Schedule-I species in the study area and the status of the Wildlife Conservation Plan.
- iv. The Project Proponent to revise the flow sheet of the sizing & screening plant by incorporating the material balance.
- v. The Project Proponent needs to submit the last certified EC compliance report by Ministry's IRO.

2.2 Proposed New Unroi-II (M.L. No. 06/2020) SMS Grade Limestone Mining Project of M/s Rajasthan State Mines and Minerals Limited with Mine Material handling 3.50 Million TPA(SMS grade Limestone ROM) out of which saleable

production recovery of SMS Grade Limestone(30mm-80mm) with sized rejects (05mm-30mm) 2.772 million tone and production recovery of rejects (-5mm) 0.728 Million Tone saleable subject to market demand with crushers (2X300 & 2X200TPH), Single Deck/Double Deck Screening Units (5X200TPH) in the mine lease area of 998 ha located near Unroi, Sub Tehsil-Ramgarh, Tehsil-Sam (Old Tehsil-Jaisalmer), District Jaisalmer, Rajasthan - [File. No: IA-J-11015/8/2023-IA-II(NCM), Proposal No: IA/RJ/MIN/424123/2023; Consultant: M/s. Overseas Min-Tech Consultants] - Terms of Reference (ToR)

The instant proposal is for mining of Limestone in New Unroi-II (M.L. No. 06/2020) SMS Grade Limestone Mining Project of M/s Rajasthan State Mines and Minerals Limited with Mine Material handling 3.50 Million TPA (SMS grade Limestone ROM) out of which saleable production recovery of SMS Grade Limestone (30mm-80mm) with sized rejects (05mm-30mm) 2.772 million tone and production recovery of rejects (-5mm) 0.728 Million Tone saleable subject to market demand with crushers (2X300 & 2X200TPH), Single Deck/Double Deck Screening Units (5X200TPH) in the mine lease area of 998 ha located near Unroi, Sub Tehsil-Ramgarh, Tehsil-Sam (Old Tehsil-Jaisalmer), District Jaisalmer, Rajasthan.

2. The details of the project as ascertained from the document submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

- i. The mine lease area is located between Latitude: 27°07'53.96025"N to 27°07'53.49376"N and Longitude: 70°29'35.75266"E to 70°30'19.32185"E. The mine lease area falls under the Survey of India Toposheet No. 40 I/08 and falls in Seismic Zone III.
- ii. The proposed project activity is listed at Schedule no. 1(a) Mining of Minerals of the schedule of the EIA Notification, 2006 and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.
- iii. Details of Mine lease:
 - a) The Project Proponent has submitted that the Government of Rajasthan granted the Letter of Intent vide for grant of mining lease vide Lr no. -P-3(8) Khan/Gp-2/2021 Jaipur, dated 05.01.2022 and subsequently letter No. Major/ Jaisal./ CC-I/ ML- 06/2020/426-431 dated 01/02/2022 for Unroi-II SMS Grade Limestone Mines over an area of 998.0 Ha.

iv. Land Use/Land Cover of the Mine Lease Area:

Private land	37.3467 Ha
Government Waste land	960.6533 Ha
Total Mining lease area (MLA), ha	998.0 Ha

v. Mining Plan Details:

Mining Plan with Progressive Mine Closure Plan approved by Indian Bureau of Mines (IBM)	Letter No.	584(4)(3)(1914)/2022RCOM-AJM
	Date	23.08.2022
	Mineral & (Major/Minor)	Limestone
	Mine Lease Area	998.0 Ha
	Validity	5 years from the date of execution of lease deed
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanized Opencast Mining Method using HEMM with deep hole drilling & blasting	
Geological Reserves	87.154 Million Tonnes	
Mineable Reserves	84.269 Million Tonnes	
Life of mine	27.04 years	
Mine Bench Height & Bench Width	3-6m (as per thickness of SMS Grade Limestone) 15m (minimum bench width)	
Maximum Depth of Working	6.5 m	
Details of ground water intersection	Mining activity will not intersect the ground water table during the plan period and conceptual period.	
Individual bench slope	75°	
Overall pit slope	75°	
Details of existing/ proposed Crusher	For the purpose of sizing of SMS Grade Limestone ROM, crushing plant will be installed within mining lease area. The crusher plant will be commissioned within 1 year from the date of the lease execution. Primary Crushing: 2x300 TPH Secondary Crushing: 2x200 TPH Single Deck/Double Deck (Screening): 5x200 TPH	
Mineral Beneficiation	No wet processing of Limestone is proposed.	
RoM output size	The ROM produced from blasting at mines will be varying in size from 500 mm to 700 mm. As per present market demand, SMS Grade Limestone will be sold in particular size range of +30 to -80 mm size and +5 to -30 mm size gitty.	
Transportation details including capacity of dumper/tipper, mode of transport and distance	The SMS Grade Limestone ROM will be transported by dumpers (25 Tons) to the crushing and screening plants (to be installed within lease area) from where the different products/Rejects will be sent to the desired places.	

Generation of Topsoil/OB & its Management during plan period & conceptual period	There is no topsoil in the mine lease area.
Generation of Mineral Rejects/Waste & its Management during plan period & conceptual period	At the end of 5 th year of mining plan, the waste quantity (OB/IB) will be 10,60,538Tonnes. The recovery of mineral is 72% of ROM, thus mineral rejects is 28%, i.e., 9,79,999 TPA.

vi. Water requirement:

Total water requirement	55.0 KLD	Domestic	15.0 KLD
		Industrial Use	40.0 KLD
Source	Drinking & Domestic water will be fulfilled from IGNP canal supply and will be transported to the mine site by tankers.		
Permission for withdrawal/ intersection along with details of grant and its validity	Permission will be obtained from the concerned authority before commencement of mining operation.		

vii. Nearest village / town/ highway/railway station / water bodies/monument:

Particulars	Particular's Name	Distance &Directions
Nearest Village	Unroi	~100 m
Nearest Highway	NH 70 (Bharat Mala Project Road)	6.5 km
Nearest Railway station	Sanu Railway siding	27 km
Water bodies	No streams/rivers flow within the mine lease area. No perennial nala is flowing within the mine lease area. Seasonal nallah is passing from East to West near Pillar-D.	

viii. Presence of Environmentally Sensitive areas in the study area:

Forest Land/Protected Area/ Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area(ESA)	Yes/No	Details of Certificate/letter/Remarks
Forest Land	No	---
Wildlife Sanctuary	No	
Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area(ESA)	No	

ix. Green belt/plantation details:

Proposed area for green belt/plantation	The area proposed for plantation will be 33% of the total area to be broken and an area of 30.0 ha will be covered under greenbelt during the first five year plan period.
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x. Rehabilitation & Resettlement (R&R):

R & R details	The mine lease area of 988 ha is a partly Govt. land and partly Private land. Some part of Village Unroi lies inside the mine lease area. Safety Zone will be maintained as per the proposal given in the approved Mining Plan. Thus, neither there will be any land ousted nor any R&R of the Project Affected Persons involved in the Unroi-II Limestone SMS grade mining project.
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xi. Court case details:

Court Case	Project Proponent submitted an undertaking by way of Affidavit in a non-judicial stamp paper of Rs 100 bearing no: BK 435762 dated 22.04.2023 stating that noany litigation is pending against the project in any court.
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xii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	Project Proponent submitted an undertaking by way of Affidavit in a non-judicial stamp paper of Rs 100 bearing no: BK 435762 dated 22.04.2023 stating that they will comply with all the statutory requirement & judgment of Hon'ble Supreme Court dated 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India &Ors.
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xiii. Details of Project cost and Employment:

Particulars	(Rs. In Crore)
Project Cost	Rs 10.0 Cr
Employment	104 persons

3. Observation and Recommendation of the EAC: -

The Project Proponent presented the KML file to indicate the site features and environmental sensitivity in the study area of 10 km radius. No habitations found within the mine lease area. No streams/rivers flow within the mine lease area. No perennial nala is flowing within the mine lease area. The Unroi-I mine lease area is adjacent to the instant mine and located on the northern side of the mine lease area and Khuiyala-I is located about at a distance of 2.5 km, SW from this instant mine. There is no topsoil present in the mine lease area. No Forest, National Park, Wildlife Sanctuary within 10 km radius of the mine lease area. The EAC asked the Project Proponent to verify with the KML file and report prepared by the Wildlife Institute of India (WII) that the instant proposal falls under the priority GIB area or not in reference to the order of the Hon'ble Supreme Court dated 19.04.2021.

The Project Proponent informed the EAC that the Letter of Intent is valid up to 31.01.2024. The total mine lease area is 998.0 ha, out of which Pvt land is 37.3467 Ha and Govt. Waste land is 960.6533 Ha. Mining Plan was approved by IBM on 23.08.2022. During mine working, a bench slope of 75° will be maintained as the mining is only single bench mining. The recovery of saleable mineral is 72% of ROM. The remaining 28% of mineral reject will be sold in the market with the object of zero waste mining as per National Mineral Policy 2019 to conserve mineral as much as possible and the same will be explored.

Further, the Project Proponent informed the EAC that geo mining conditions for all three proposals are similar in nature. The EAC asked the Project Proponent to show the KML file of other two proposals individually. The Project Proponent presented the KML file to indicate the site features and environmental sensitivity in the study area of 10 km radius. NH-70 (Bharat Mala Project Road) passes through the Khuiyala-Imine lease area. There is no topsoil present in the other two mine lease areas Unroi-I&Khuiyala-I. No Forest, National Park, Wildlife Sanctuary within 10 km radius of the mine lease area. The Project Proponent also informed the EAC that the validity of Letter of Intent (LoI) is same in both proposals (Unroi-I & Khuiyala-I) i.e., 31.01.2024. Further, the Project Proponent informed the EAC that there are no court cases pending against the proposals of Unroi-I, Unroi-II & Khuiyala-I. The EAC opined that the instead of going for new dedicated road for transportation, the Project Proponent should explore the possibility of developing the existing road without disturbing the other infrastructures. The EAC also opined that the Project Proponent submit the action plan for development of greenbelt/plantation in consultation with the research institutes.

After detailed deliberations, made by the Project Proponent and the Consultant, the EAC under the provisions of EIA Notification 2006 and its subsequent amendments, **recommended** the proposal for grant of Terms of Reference (ToR) to M/s Rajasthan State Mines and Minerals Limited for mining of Limestone in New Unroi-II (M.L. No. 06/2020) SMS Grade Limestone Mining Project with Mine Material handling 3.50 Million TPA (SMS grade Limestone ROM) out of which saleable production recovery of SMS Grade Limestone (30mm-80mm) with sized rejects (05mm-30mm) 2.772 million tone and production recovery of rejects (-5mm) 0.728 Million Tone saleable subject to market demand with crushers(2X300 & 2X200TPH), Single Deck/Double Deck Screening Units (5X200TPH) in the mine lease area of 998 ha located near Unroi, Sub Tehsil-Ramgarh, Tehsil-Sam (Old Tehsil-Jaisalmer), District Jaisalmer, Rajasthan for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions applicable for non-coal mining projects:-

- i. At the time of submission of EC proposal, the Project Proponent needs to verify with the KML file and report prepared by the Wildlife Institute of India (WII) whether that the instant proposal falls under the priority GIB area or not in reference to the

order of the Hon'ble Supreme Court dated 19.04.2021. The same should be vetted by the State Forest Department along with the authenticated map. Ministry may also seek comments from WL Division in the matter.

- ii. The Project Proponent needs to submit the action plan to utilize the mineral rejects effectively with the objective of achieving zero waste mining in the EIA/EMP report.
- iii. The Project Proponent needs to submit the ecology restoration plan.
- iv. The Project Proponent needs to submit the action plan for year wise backfilling.
- v. The Project Proponent needs to submit the details of the nearest school present in the vicinity of the mine lease area by mentioning the distance and direction of the school from the mine lease area, strength of the school, working time of school, blasting time and the measures to be taken for control of ground vibration and fly rock.
- vi. The Project Proponent needs to submit the measures to be taken for protection of seasonal nallahs from the mining activity.
- vii. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
- viii. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air and noise pollution.
- ix. The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.
- x. The Project Proponent needs to carry out the cumulative impact assessment by considering all the mining activity including the transport scenario of the other mines in the study area and should indicate the capacity of each mine considered for predication of air quality modeling. The control case and worst-case scenario

needs to be demonstrated with controlling factor and GLCs values for all the pollutants needs to be clearly mentioned. The input parameters used for the modeling also needs to be submitted.

- xi. The Project Proponent should explore the possibility of developing the existing road without disturbing the other infrastructures. The Project Proponent shall ensure that the mineral transportation route shall not pass through any village road.
- xii. The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the centre on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road and the carrying capacity of the road.
- xiii. The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
- xiv. The Project Proponent needs to submit the greenbelt/afforestation development plan for undertaking plantation in the periphery of the mine lease boundary, safety zone etc., The details of the no. of saplings proposed, type of species, spacing and the area to be covered including the cost and timeline for completion of plantation needs to be provided in the EIA report. The Project Proponent needs to submit the action plan for development of greenbelt/plantation in consultation with the research institutes.
- xv. The Project Proponent needs to submit employment based skill development plan for the local people and thrust should be to provide employment to local people after imparting training.
- xvi. The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.

2.3 Proposed New Unroi-I (M.L. No. 05/2020) SMS Grade Limestone Mining Project of M/s Rajasthan State Mines and Minerals Limited with Mine Material handling capacity i.e. SMS Grade Limestone ROM 3.50 million tone with saleable production recovery of SMS Grade Limestone(30mm-80mm) with sized rejects (05mm-30mm) 2.772 million tone and production recovery of rejects (-5mm) 0.728 Million Tone saleable subject to market demand with crushers (2X300 &

2X200TPH), Single Deck/Double Deck Screening Units (5X200TPH) in the mine lease area of 998 ha., located near Unroi, Sub Tehsil-Ramgarh, Tehsil-Sam (Old TehsilJaisalmer), District Jaisalmer, Rajasthan - [File. No: IA-J-11015/9/2023-IA-II(NCM), Proposal No: IA/RJ/MIN/424677/2023; Consultant: M/s. Overseas Min-Tech Consultants] - Terms of Reference (ToR)

The instant proposal is for mining of Limestone in New Unroi-I (M.L. No. 05/2020) SMS Grade Limestone Mining Project of M/s Rajasthan State Mines and Minerals Limited with Mine Material handling capacity i.e. SMS Grade Limestone ROM 3.50 million tone with saleable production recovery of SMS Grade Limestone(30mm-80mm) with sized rejects (05mm-30mm) 2.772 million tone and production recovery of rejects (-5mm) 0.728 Million Tone saleable subject to market demand with crushers (2X300 TPH& 2X200TPH), Single Deck/Double Deck Screening Units (5X200TPH) in the mine lease area of 998 ha., located near Unroi, Sub Tehsil-Ramgarh, Tehsil-Sam (Old Tehsil Jaisalmer), District Jaisalmer, Rajasthan.

2. The details of the project as ascertained from the document submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

- i. The mine lease area is located between Latitude: 27°09'40.42178"N to 27°09'38.32686"N and Longitude - 70°28'13.62387"E to 70°31'29.74277"E. The mine lease area falls under the Survey of India Toposheet No. 40 I/08 and falls in Seismic Zone III.
- ii. The proposed project activity is listed at Schedule no. 1(a) Mining of Minerals of the schedule of the EIA Notification, 2006 and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.
- iii. Details of Mine lease:
 - b) The Project Proponent has submitted that the Government of Rajasthan granted the Letter of Intent vide for grant of mining lease vide Lrno. -P-3(7) Khan/Gp-2/2021/142 Jaipur, dated 05.01.2022 and subsequently letter No. Major/ Jaisal./ CC-I/ ML- 05/2020/420-425 dated 01/02/2022 for Unroi-I SMS Grade Limestone Mines over an area of 998.0 Ha.

iv. Land Use/Land Cover of the Mine Lease Area:

Private land	40.6443 Ha
Government Waste land	957.3557 Ha
Total Mining lease area (MLA), ha	998.0 Ha

v. Mining Plan Details:

	Letter No.	584(4)(3)(1913)/2022RCOM-AJM
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Mining Plan with Progressive Mine Closure Plan approved by Indian Bureau of Mines (IBM)	Date	16.08.2022
	Mineral & (Major/Minor)	Limestone
	Mine Lease Area	998.0 Ha
	Validity	5 years from the date of execution of lease deed
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanized Opencast Mining Method using HEMM with drilling & blasting	
Geological Reserves	90.986 Million Tonnes	
Mineable Reserves	89.087 Million Tonnes	
Life of mine	27.04 years	
Mine Bench Height & Bench Width	3-6m (as per thickness of SMS Grade Limestone) 15m (minimum bench width)	
Maximum Depth of Working	6.0 m	
Details of ground water intersection	Mining activity will not intersect the ground water table during the plan period and conceptual period.	
Individual bench slope	75°	
Overall pit slope	75°	
Details of existing/ proposed Crusher	For the purpose of sizing of SMS Grade Limestone ROM, crushing plant will be installed within mining lease area. The crusher plant will be commissioned within 6 months from the rider agreement of mining lease. Primary Crushing: 2x300 TPH Secondary Crushing: 2x200 TPH Single Deck/Double Deck (Screening): 5x200 TPH	
Mineral Beneficiation	No wet processing of Limestone is proposed.	
RoM output size	The ROM produced from blasting at mines will be varying in size from 500 mm to 700 mm. As per present market demand, SMS Grade Limestone will be sold in particular size range of +30 to -80 mm size and +5 to -30 mm size gitty.	
Transportation details including capacity of dumper/tipper, mode of transport and distance	The SMS Grade Limestone ROM will be transported by dumpers (25 Tons) to the crushing and screening plants (to be installed within lease area) from where the different products/Rejects will be sent to the desired places.	
Generation of Topsoil/OB & its Management during plan period & conceptual period	There is no topsoil in the mine lease area.	

Generation of Mineral Rejects/Waste & its Management during plan period & conceptual period	There will be no waste. At the 1 st year, mineral reject in size range -5 mm (generates @ 28% of ROM) will be stacked outside mined out pit. From the 2 nd year onwards, mineral reject is proposed to be backfilled in mined out area. The recovery of mineral is 72% of ROM, thus mineral rejects is 28%, i.e., 9,79,999 TPA.
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vi. Water requirement:

Total water requirement	55.0 KLD	Domestic	15.0 KLD
		Industrial Use	40.0 KLD
Source	Drinking & Domestic water will be fulfilled from IGNP canal supply and will be transported to the mine site by tankers.		
Permission for withdrawal/ intersection along with details of grant and its validity	Permission will be obtained from the concerned authority before commencement of mining operation.		

vii. Nearest village / town/ highway/railway station / water bodies/monument:

Particulars	Particular's Name	Distance & Directions
Nearest Village	Unroi	~100 m
Nearest Highway	NH 70 (Bharat Mala Project Road)	7 km
Nearest Railway station	Sanu Railway siding	27 km
Water bodies	No streams/rivers flow within the mine lease area. No perennial nala is flowing within the mine lease area. Seasonal nallah is passing from East to West near Pillar-D.	

viii. Presence of Environmentally Sensitive areas in the study area:

Forest Land/Protected Area/ Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area(ESA)	Yes/No	Details of Certificate/letter/Remarks
Forest Land	No	---
Wildlife Sanctuary	No	
Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area(ESA)	No	

ix. Green belt/plantation details:

Proposed area for green belt/plantation	The area proposed for plantation will be 33% of the total area to be broken and an area of 30.0 ha will be covered under greenbelt during the first five year plan period.
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x. Rehabilitation & Resettlement (R&R):

R & R details	The mine lease area of 988 ha is a partly Govt. land and partly Private land. Some part of Village Unroi lies inside the mine lease area. Safety Zone will be maintained as per the proposal given in the approved Mining Plan. Thus, neither there will be any land ousted nor any R&R of the Project Affected Persons involved in the Unroi-1 Limestone SMS grade mining project.
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xi. Court case details:

Court Case	Project Proponent submitted an undertaking by way of Affidavit in a non-judicial stamp paper of Rs 100 bearing no: BK 435780 dated 22.04.2023 stating that noany litigation is pending against the project in any court.
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xii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	Project Proponent submitted an undertaking by way of Affidavit in a non-judicial stamp paper of Rs 100 bearing no: BK 435780 dated 22.04.2023stating that they will comply with all the statutory requirement & judgment of Hon'ble Supreme Court dated 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India &Ors.
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xiii. Details of Project cost and Employment:

Particulars	(Rs. In Crore)
Project Cost	Rs 10.0 Cr
Employment	104 persons

3. Observation and Recommendation of the EAC: -

The EAC deliberated the instant proposal along with Unroi-II and Khuiyala-I. After detailed deliberations, made by the Project Proponent and the Consultant, the EAC in its EAC (Non-Coal Mining) meeting held during 3-4 May, 2023, the EAC under the provisions of EIA Notification 2006 and its subsequent amendments, the EAC **recommended** the proposal for grant of Terms of Reference (ToR) to M/s Rajasthan State Mines and Minerals Limited for mining of Limestone in New Unroi-I (M.L. No. 05/2020) SMS Grade Limestone Mining Project with Mine Material handling capacity i.e. SMS Grade Limestone ROM 3.50 million tone with saleable production recovery of SMS Grade Limestone (30mm-80mm) with sized rejects (05mm-30mm) 2.772 million tone and production recovery of rejects (-5mm) 0.728 Million Tone saleable subject to market demand with crushers (2X300TPH & 2X200TPH), Single Deck/Double Deck Screening Units (5X200TPH) in the mine lease area of 998 ha., located near Unroi, Sub Tehsil-Ramgarh, Tehsil-Sam (Old Tehsil Jaisalmer), District Jaisalmer, Rajasthan for undertaking detailed EIA/EMP study

subject to the following specific conditions in addition to the standard ToR conditions applicable for non-coal mining projects:-

- i. At the time of submission of EC proposal, the Project Proponent needs to verify with the KML file and report prepared by the Wildlife Institute of India (WII) whether that the instant proposal falls under the priority GIB area or not in reference to the order of the Hon'ble Supreme Court dated 19.04.2021. The same should be vetted by the State Forest Department. Ministry may also seek comments from WL Division in the matter.
- ii. The Project Proponent needs to submit the action plan to utilize the mineral rejects effectively with the objective of achieving zero waste mining in the EIA/EMP report.
- iii. The Project Proponent needs to submit the ecology restoration plan.
- iv. The Project Proponent needs to submit the action plan for year wise backfilling.
- v. The Project Proponent needs to submit the details of the nearest school present in the vicinity of the mine lease area by mentioning the distance and direction of the school from the mine lease area, strength of the school, working time of school, blasting time and the measures to be taken for control of ground vibration and fly rock.
- vi. The Project Proponent needs to submit the measures to be taken for protection of seasonal nallahs from the mining activity.
- vii. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
- viii. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air and noise pollution.
- ix. The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.

- x. The Project Proponent needs to carry out the cumulative impact assessment by considering all the mining activity including the transport scenario of the other mines in the study area and should indicate the capacity of each mine considered for predication of air quality modeling. The control case and worst-case scenario needs to be demonstrated with controlling factor and GLCs values for all the pollutants needs to be clearly mentioned. The input parameters used for the modeling also needs to be submitted.
- xi. The Project Proponent should explore the possibility of developing the existing road without disturbing the other infrastructures. The Project Proponent shall ensure that the mineral transportation route shall not pass through any village road.
- xii. The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the centre on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road and the carrying capacity of the road.
- xiii. The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
- xiv. The Project Proponent needs to submit the greenbelt/afforestation development plan for undertaking plantation in the periphery of the mine leaseboundary, safety zone etc., The details of the no. of saplings proposed, type of species, spacing and the area to be covered including the cost and timeline for completion of plantation needs to be provided in the EIA report. The Project Proponent needs to submit the action plan for development of greenbelt/plantation in consultation with the research institutes.
- xv. The Project Proponent needs to submit employment based skill development plan for the local people and thrust should be to provide employment to local people after imparting training.
- xvi. The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.

2.4 Proposed New Khuiyala-I (M.L. No. 01/2020) SMS Grade Limestone Mining Project of M/s Rajasthan State Mines and Minerals Limited, with mine material handling capacity i.e. SMS Grade Limestone ROM 3.508 million tone with saleable production recovery of SMS Grade Limestone(30mm-80mm) with sized rejects (05mm-30mm) 2.779 million tone and production recovery of rejects (-5mm) 0.729 Million Tone saleable subject to market demand with crushers (2X300 & 2X200TPH), Single Deck/Double Deck Screening Units (5X200TPH) in the mine lease area of 944 ha, located near Unroi, Sub Tehsil-Ramgarh, Tehsil-Sam (Old Tehsil-Jaisalmer), District Jaisalmer, Rajasthan – [File.No: IA-J-11015/10/2023-IA-II(NCM), Proposal No: IA/RJ/MIN/424210/2023; Consultant: M/s. Overseas Min-Tech Consultants] – Terms of Reference (ToR)

The instant proposal is for mining of Limestone in New Khuiyala-I (M.L. No. 01/2020)SMS Grade Limestone Mining Project of M/s Rajasthan State Mines and Minerals Limited, with mine material handling capacity i.e. SMS Grade Limestone ROM 3.508 million tone with saleable production recovery of SMS Grade Limestone(30mm-80mm) with sized rejects (05mm-30mm) 2.779 million tone and production recovery of rejects (-5mm) 0.729 Million Tone saleable subject to market demand with crushers (2X300 & 2X200TPH), Single Deck/Double Deck Screening Units (5X200TPH) in the mine lease area of 944 ha, located near Unroi, Sub Tehsil-Ramgarh, Tehsil-Sam (Old Tehsil-Jaisalmer), District Jaisalmer, Rajasthan.

2. The details of the project as ascertained from the document submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

- i. The mine lease area is located between Latitude: 27°08'39.50624"N to 27°08'39.95381"N and Longitude: 70°27'03.60445"E to 70°26'20.02696"E. The mine lease area falls under the Survey of India Toposheet No. 40 I/08 and falls in Seismic Zone III.
- ii. The proposed project activity is listed at Schedule no. 1(a) Mining of Minerals of the schedule of the EIA Notification, 2006 and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.
- iii. Details of Mine lease:
 - c) The Project Proponent has submitted that the Government of Rajasthan granted the Letter of Intent vide for grant of mining lease vide letter no. -P-3(10)Khan/Gp-2/2021/Jaipur, dated 05.01.2022 for Khuiyala-I SMS Grade Limestone Mines over an area of 944.0 Ha.

iv. Land Use/Land Cover of the Mine Lease Area:

Private land	110.1358 Ha
Government Waste land	833.8642 Ha

Total Mining lease area (MLA), ha	944.0 Ha
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v. Mining Plan Details:

Mining Plan with Progressive Mine Closure Plan approved by Indian Bureau of Mines (IBM)	Letter No.	584(4)(3)(1912)/2022RCOM-AJM
	Date	01.08.2022
	Mineral & (Major/Minor)	Limestone
	Mine Lease Area	944.0 Ha
	Validity	5 years from the date of execution of lease deed
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanized Opencast Mining Method using HEMM with deephole drilling & blasting	
Geological Reserves	66.64 Million Tonnes	
Mineable Reserves	63.72 Million Tonnes	
Life of mine	19.4 years	
Mine Bench Height & Bench Width	3-9m (as per thickness of SMS Grade Limestone) 15m (minimum bench width)	
Maximum Depth of Working	19 m	
Details of ground water intersection	Mining activity will not intersect the ground water table during the plan period and conceptual period.	
Individual bench slope	75°	
Overall pit slope	75°	
Details of existing/ proposed Crusher	For the purpose of sizing of SMS Grade Limestone ROM, crushing plant will be installed within mining lease area. Crusher unit will be installed after execution of area and will commence from one year. Primary Crushing: 2x300 TPH Secondary Crushing: 2x200 TPH Single Deck/Double Deck (Screening): 5x200 TPH	
Mineral Beneficiation	No wet processing of Limestone is proposed.	
RoM output size	The ROM produced from blasting at mines will be varying in size from 500 mm to 700 mm. As per present market demand, SMS Grade Limestone will be sold in particular size range of +30 to -80 mm size and +5 to -30 mm size gitty.	
Transportation details including capacity of dumper/tipper, mode of transport and distance	The SMS Grade Limestone ROM will be transported by dumpers (25 Tons) to the crushing and screening plants (to be installed within lease	

	area) from where the different products/Rejects will be sent to the desired places.
Generation of Topsoil/OB & its Management during plan period & conceptual period	There is no topsoil in the mine lease area.
Generation of Mineral Rejects/Waste & its Management during plan period & conceptual period	At the end of 5 th year of mining plan, the waste quantity (OB/IB) will be 3,90,000Tonnes. At the 1 st year, mineral reject in size range -5 mm (generates @ 28% of ROM) will be stacked outside mined out pit. From the 2 nd year onwards, mineral reject is proposed to be backfilled in mined out area. The recovery of mineral is 72% of ROM, thus mineral rejects is 28%, i.e., 982354.8 TPA.

vi. Water requirement:

Total water requirement	55.0 KLD	Domestic	15.0 KLD
		Industrial Use	40.0 KLD
Source	Drinking & Domestic water will be fulfilled from IGNP canal supply and will be transported to the mine site by tankers.		
Permission for withdrawal/ intersection along with details of grant and its validity	Permission will be obtained from the concerned authority before commencement of mining operation.		

vii. Nearest village / town/ highway/railway station / water bodies/monument:

Particulars	Particular's Name	Distance & Directions
Nearest Village	Khuiyala	~100 m
Nearest Highway	NH 70 (Bharat Mala Project Road)	Passes through the mine lease area
Nearest Railway station	Sanu Railway siding	29 km
Water bodies	No streams/rivers flow within the mine lease area. No perennial nala is flowing within the mine lease area.	
	Sam Nadi,	50 m, North
	Kandal Nay,	6.3 km
	Londhi Nay	8.3 km, South
	Gadrabbranch	9.9km, NorthWest
	(Indira Gandhi Nahar)	
	Vikharanwala Nay	7.0 km North West

viii. Presence of Environmentally Sensitive areas in the study area:

Forest Land/Protected Area/ Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area(ESA)	Yes/No	Details of Certificate/letter/Remarks

Forest Land	No	---
Wildlife Sanctuary	No	
Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area(ESA)	No	

ix. Green belt/plantation details:

Proposed area for green belt/plantation	The area proposed for plantation will be 33% of the total area to be broken and an area of 24.0 ha will be covered under greenbelt during the first five year plan period.
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x. Rehabilitation & Resettlement (R&R):

R & R details	The mine lease area of 944 ha is a partly Govt. land and partly Private land. Some part of Village Khuiyala lies inside the mine lease area. Safety Zone will be maintained as per the proposal given in the approved Mining Plan. Thus, neither there will be any land ousted nor any R&R of the Project Affected Persons involved in the Khuiyala Limestone SMS grade mining project.
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xi. Court case details:

Court Case	Project Proponent submitted an undertaking by way of Affidavit in a non-judicial stamp paper of Rs 100 bearing no: BK 435671 dated 22.04.2023 stating that noany litigation is pending against the project in any court.
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xii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	Project Proponent submitted an undertaking by way of Affidavit in a non-judicial stamp paper of Rs 100 bearing no: BK 435671 dated 22.04.2023 stating that they will comply with all the statutory requirement & judgment of Hon'ble Supreme Court dated 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India &Ors.
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xiii. Details of Project cost and Employment:

Particulars	(Rs. In Crore)
Project Cost	Rs10.0 Cr
Employment	90 persons

3. Observation and Recommendation of the EAC: -

The EAC deliberated the instant proposal along with Unroi-I and Unroi-II. After detailed deliberations, made by the Project Proponent and the Consultant, the EAC in its

EAC (Non-Coal Mining) meeting held during 3-4 May, 2023, the EAC under the provisions of EIA Notification 2006 and its subsequent amendments, the EAC **recommended** the proposal for grant of Terms of Reference (ToR) to M/s Rajasthan State Mines and Minerals Limited for mining of Limestone in Khuiyala-I (M.L. No. 01/2020) SMS Grade Limestone Mining Project with mine material handling capacity i.e. SMS Grade Limestone ROM 3.508 million tone with saleable production recovery of SMS Grade Limestone (30mm-80mm) with sized rejects (05mm-30mm) 2.779 million tone and production recovery of rejects (-5mm) 0.729 Million Tone saleable subject to market demand with crushers (2X300 & 2X200TPH), Single Deck/Double Deck Screening Units (5X200TPH) in the mine lease area of 944 ha, located near Unroi, Sub Tehsil-Ramgarh, Tehsil-Sam (Old Tehsil-Jaisalmer), District Jaisalmer, Rajasthan for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions applicable for non-coal mining projects:-

- i. At the time of submission of EC proposal, the Project Proponent needs to verify with the KML file and report prepared by the Wildlife Institute of India (WII) whether that the instant proposal falls under the priority GIB area or not in reference to the order of the Hon'ble Supreme Court dated 19.04.2021. The same should be vetted by the State Forest Department. Ministry may also seek comments from WL Division in the matter.
- ii. The Project Proponent needs to submit the action plan to utilize the mineral rejects effectively with the objective of achieving zero waste mining in the EIA/EMP report.
- iii. The Project Proponent needs to submit the ecology restoration plan.
- iv. The Project Proponent needs to submit the action plan for year wise backfilling.
- v. The Project Proponent needs to submit the details of the nearest school present in the vicinity of the mine lease area by mentioning the distance and direction of the school from the mine lease area, strength of the school, working time of school, blasting time and the measures to be taken for control of ground vibration and fly rock.
- vi. The Project Proponent needs to submit the measures to be taken for protection of seasonal nallahs from the mining activity.
- vii. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall

propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.

- viii. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air and noise pollution.
- ix. The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.
- x. The Project Proponent needs to carry out the cumulative impact assessment by considering all the mining activity including the transport scenario of the other mines in the study area and should indicate the capacity of each mine considered for predication of air quality modeling. The control case and worst-case scenario needs to be demonstrated with controlling factor and GLCs values for all the pollutants needs to be clearly mentioned. The input parameters used for the modeling also needs to be submitted.
- xi. The Project Proponent should explore the possibility of developing the existing road without disturbing the other infrastructures. The Project Proponent shall ensure that the mineral transportation route shall not pass through any village road.
- xii. The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the centre on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road and the carrying capacity of the road.
- xiii. The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
- xiv. The Project Proponent needs to submit the greenbelt/afforestation development plan for undertaking plantation in the periphery of the mine leaseboundary, safety zone etc., The details of the no. of saplings proposed, type of species, spacing and the area to be covered including the cost and timeline for completion of plantation needs to be provided in the EIA report. The Project Proponent needs to submit the

action plan for development of greenbelt/plantation in consultation with the research institutes.

- xv. The Project Proponent needs to submit employment based skill development plan for the local people and thrust should be to provide employment to local people after imparting training.
- xvi. The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.

2.5 Report of the field visit undertaken by EAC sub-committee during 7-13 April 2023 at Taliha Graphite Deposit of M/s Sthenos Cement Private Limited for mining of Graphite with proposed production capacity of 4,10,879 TPA (ROM) of Graphite, Topsoil: 82,201.99 TPA, OB/SB/IB: 3,58,926.45 TPA, Total Excavation: 8,52,007.4 TPA along with the setting up of three mobile crushers at pit mouth with capacity of 100 t/h each to crush the mineralized material to <80mm size in the mine lease area of 496.0 Ha, located at Village Taliha, Tehsil Taliha, Upper Subansiri District, Arunachal Pradesh

1. The instant proposal is for mining of Graphite in Taliha Graphite Deposit with proposed production capacity of 4,10,879 TPA (ROM) of Graphite, Topsoil: 82,201.99 TPA, OB/SB/IB: 3,58,926.45 TPA, Total Excavation: 8,52,007.4 TPA along with the setting up of three mobile crushers at pit mouth with capacity of 100 t/h each to crush the mineralized material to <80mm size in the mine lease area of 496.0 Ha, located at Village Taliha, Tehsil Taliha, Upper Subansiri District, Arunachal Pradesh. The mine lease area is located between Latitude: 28°13'30.539"N to 28°14'41.651"N and Longitude: 94°07'6.850" E to 94°09'26.539"E. The mine lease area falls under the Survey of India Toposheet No: 82L/4 and falls in Seismic Zone-V.

2. The total mine lease area is 496 ha, out of which Private land is 476.78 ha, Public road is 7.74 ha and River is 11.48 ha.

3. The mining lease was granted by the Govt. of Arunachal Pradesh vide letter dated 29.01.2021 for mining of Graphite over an area of 496 ha for a period of 50 years. Mining lease deed executed on 29.01.2021 and registered on 05.02.2021 for the term of 50 years i.e., for the period upto 04.02.2071.

4. Mining Plan along with Progressive Mine Closure Plan was approved by Indian Bureau of Mines (IBM) vide letter dated 12.08.2021 for mining of Graphite over an area of 496 ha for the period 2021-22 to 2025-26. Method of mining will be fully open cast mechanized mining with formation of benches by drilling and blasting. The excavated

waste and Graphite bearing material (GBM) will be transported to temporary dump and stock yard respectively through trucks. No mineral processing proposed, only three mobile crushers at pit mouth with capacity of 100 t/h each to crush the mineralized material to < 80 mm size.

5. As informed by the project proponent, there is no forest land involved in the mine lease area and no National Park, Wildlife Sanctuary, Eco Sensitive Zone located within 10 km radius of the study area.

6. There are three villages located within the mine lease area with a total population of 2,389 nos. The Project Proponent has submitted that proposed area to be mined currently i.e., GR-4 (working pit) is located at an avg. aerial distance of 250 m from the habitation (Taliha Village). Mining site is quite far from the village habitation. So, there will be no relocation/shifting of the locals. Hence R&R plan is not applicable on the project during the plan period.

7. The Project Proponent reported that there is one court case pending before the Hon'ble High Court Guwahati vide WP (C)/1104/2022 titled STHENOS CEMENT PRIVATE LIMITED and ANR, vs. the Union of India and 3 Ors. The petition challenges the revocation of the mining plan of Sthenos Cement Private limited by the regional Controller of Mines, Indian Bureau of Mines, Bhubaneswar. The Hon'ble High Court has on 08.03.2022 stayed the operation of the revocation of the approval of the Mining Plan. The said stay has been continued by subsequent orders dated 04.04.2022, 26.04.2022 and 31.08.2022. The said stay order is valid and subsisting.

8. The instant proposal was earlier considered in the 5th EAC (Non-Coal Mining) meeting held during 18-20, October, 2022 and after detailed deliberations, the EAC noted that the mine lease is located in the north eastern region and falls under seismic zone V. The EAC noted that the project site has hilly terrain and is rich in greenery. Three villages are located in the lease area and 34 villages are within 5 kilo meters distance. The subanshiri river flows adjacent to the mine lease area. The drainage of the area is mainly controlled by the gullis and valley of the terrain as well as the natural slope of the area. The proposed mining shall result in topographical changes that will require stabilization. The project also involves construction activities to meet the infrastructure needs for the mine. In view of the above, the EAC opined that a subcommittee comprising of EAC members and Officials of the Ministry may visit the site to ascertain the ground realities of the project. Accordingly, the site visit was scheduled during 7-13 April 2023. Considering the recommendations of EAC, the Ministry vide order dated 09.03.2023 has constituted a Sub-Committee comprising of the following members.

1. *Shri Niranjankumar Vasu, EAC Member
2. Shri. Avijit Ghosh, EAC Member
3. Prof DeveshWalia, EAC Member
4. Shri. Pankaj Verma, Scientist E and Member Secretary EAC, MoEF&CC
5. Dr. Hemen Hazarika, Scientist E, MoEF&CC, IRO, Guwahati
6. Shri VidyasagarJha, Research Officer, MoEF&CC

* Owing to sudden demise of the family member, Shri N K Vasu could not attend the site visit.

9. The Mining Lease area is located at a distance of around 45 km from Daporijo in north direction. The entire road leading from Daporijo to Mine lease area is under construction. Few stretches of paved roads have been made. The district headquarter is located at Daporijo. The nearest rail head is located at Silapathar, Assam. The mine lease area is highly rugged and exhibits dissected topography. The elevation of the area varies from 315 m to 740 m.

10. The Project Proponent informed that the estimated mineable reserve stands at 2,929,424 t (considering recovery factor as 95%) and life of mine is around 12 years as inferred from pit and borehole data. The above figure shall be modified after G1 level future exploration.

11. The Committee members conducted a day-long field trip on 10.04.2023, visiting the mine site and proposed mining pits within the mine lease area. During the field visit, it was slightly raining. The project proponent gave a brief overview about the existing structure of the mine and the proposed course of action planned by them. Primarily, the site visit was to ascertain the topographical changes that would require stabilization owing to the mining and construction activities to meet the infrastructure needs for the mine.

12. During the visit the committee observed the following: -

1. The proposed mine pit is located at a hill top and the proposed method of mining is opencast. The PP informed that the mine operation will be fully mechanized with drilling and blasting. Overburden will be removed by excavator, and dumper combination. Benching would be done in a systematic manner to maintain slope gradient of 70°. The ramp width and gradient would be 7.5 m and 1:14 to 1:16 respectively. Bench height and width will be 5 m and 7.5 m, respectively.



2. The committee observed the dense vegetation throughout the mine lease area and visited the mine lease boundary which extends from bottom to the hill top.
3. The current topography of the proposed mining pit was - Top RL (m)/Zmax-652 m, and bottom RL (m)/Zmin-595. The PP informed that starting RL during commencement of mining shall be 651.25 m and final depth (RL) after 5 years of mining will be 595 m. The PP also informed that the working on the existing topography will not affect the habitation of Taliha Village. The aerial distance between the proposed mine site and the habitation is reported to be 250m
4. The committee also observed that boundary pillars were erected by the project proponent (PP) alongside the lease boundary. The latitude and longitude of the boundary pillars is given as under: -

TALIHAGRAPHITEMINE LEASEBOUNDARYPILLARDETAILS				
Sl.No	BOUNDARY PILLAR	LATITUDE	LONGITUDE	RL(m)
1	BP_01	28°14'41.459" N	94°7'57.045"E	605
2	BP_02	28°14'29.494" N	94°7'55.468"E	383
3	BP_03	28°14'12.327" N	94°8'58.972"E	337
4	BP_04	28°14'1.448" N	94°9'26.539"E	315
5	BP_05	28°13'36.785" N	94°9'25.187"E	312
6	BP_06	28°13'30.539" N	94°9'8.212"E	561
7	BP_07	28°13'34.153" N	94°8'43.366"E	706
8	BP_08	28°13'39.195" N	94°8'33.162"E	749
9	BP_09	28°13'45.270" N	94°7'28.331"E	581
10	BP_10	28°13'48.438" N	94°7'6.850"E	739
11	BP_11	28°14'10.099" N	94°7'9.177"E	597
12	BP_12	28°14'41.651" N	94°7'31.805"E	363



Boundary Pillars

5. The Subansiri River runs from northern part of the lease area and flows towards the southern side.
6. The dumping and the stock yard site was located near to the subansiri river, located to southern side of the mining pit. The PP informed that dump site is around 101 m away from the river bank and the temporary stock yard is around 106 m from the river bank. The committee observed that location of the dump and the stock yard is on the slope of the hill and extends to the bottom of the hill. Location of the proposed dump is shown in the map.



Dump and Stock Yard

7. The committee further observed that the roads suggested by PP are not in a suitable condition to carry 20 tonne dumpers. The PP informed that they will not be using the roads running through the village to carry the ROM to the dump and stock yard. Shown in the attached map- Annexure-1.
13. In view of the above observation committee recommended the following: -

1. Owing to the hilly terrain and steep slopes, committee is of the opinion that PP may undertake land subsidence studies.
2. Even though, the aerial distance between the proposed mine site to the nearest habitation is 250 m, project proponent should undertake vibration studies.
3. The Committee asked the project proponent whether any alternate location is identified for creating dump and stock yard, the project proponent replied that owing to topographical constraint there is no other location suitable to create a dump and stock yard. The committee was of the opinion that PP may stock the mineral at Mine site and may create a dump site only for the rejects.
4. The Committee was of the opinion that project proponent may explore the options for dedicated road for transport of minerals within Mine lease area if possible;
5. To maintain the pristine nature of the Hill and Subansiri River, committee was of the opinion that PP should include provision for permanent sprinklers for the entire mineral transportation route as proposed in their mine plan.
6. Since the dumping site is near to the river, committee suggested that project proponent should ensure that dumping site is constructed in such a manner to ensure that mineral rejects are prevented from reaching the river during rainy season or in case of flood. All mitigative measures such as garland drainage, retaining wall and silt check dam should be constructed near the waste dump yard to prevent surface run off.

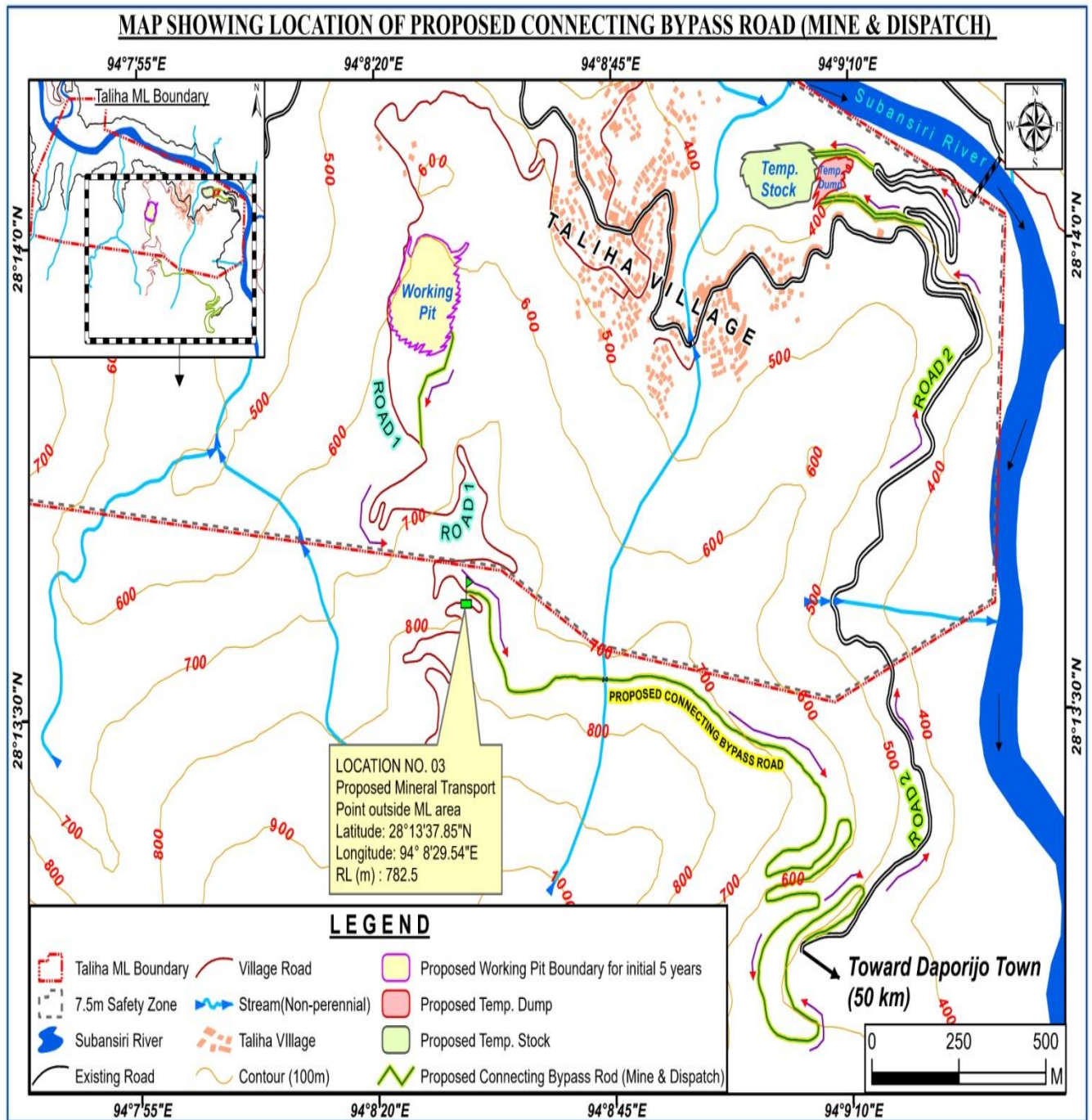
14. The committee visited following location, which is also shown in the attached map in Annexure-2.

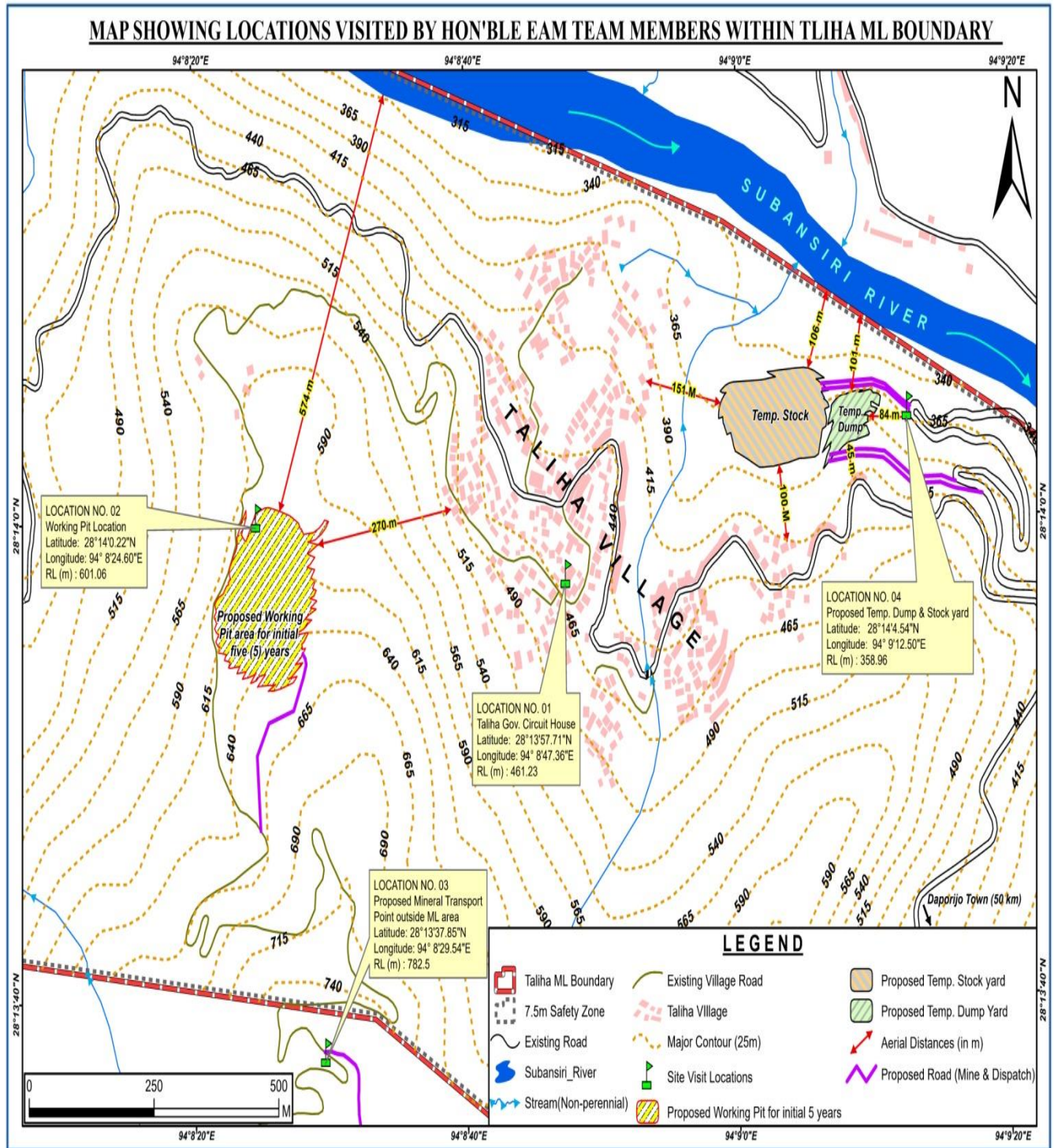
Sl. No.	Location Details	Latitude	Longitude	RL(M)
1	Location 1 : Taliha Gov. Circuit House	28°13'57.71"N	94° 8'47.36"E	461.23
2	Location 2 : Working Pit Area	28°14'0.22"N	94° 8'24.60"E	601.06
3	Location 3 : Proposed Mineral Transport Route Point	28°13'37.85"N	94° 8'29.54"E	782.5
4	Location 4 : Temp. Dump/Stock Location From Road	28°14'4.54"N	94° 9'12.50"E	358.96

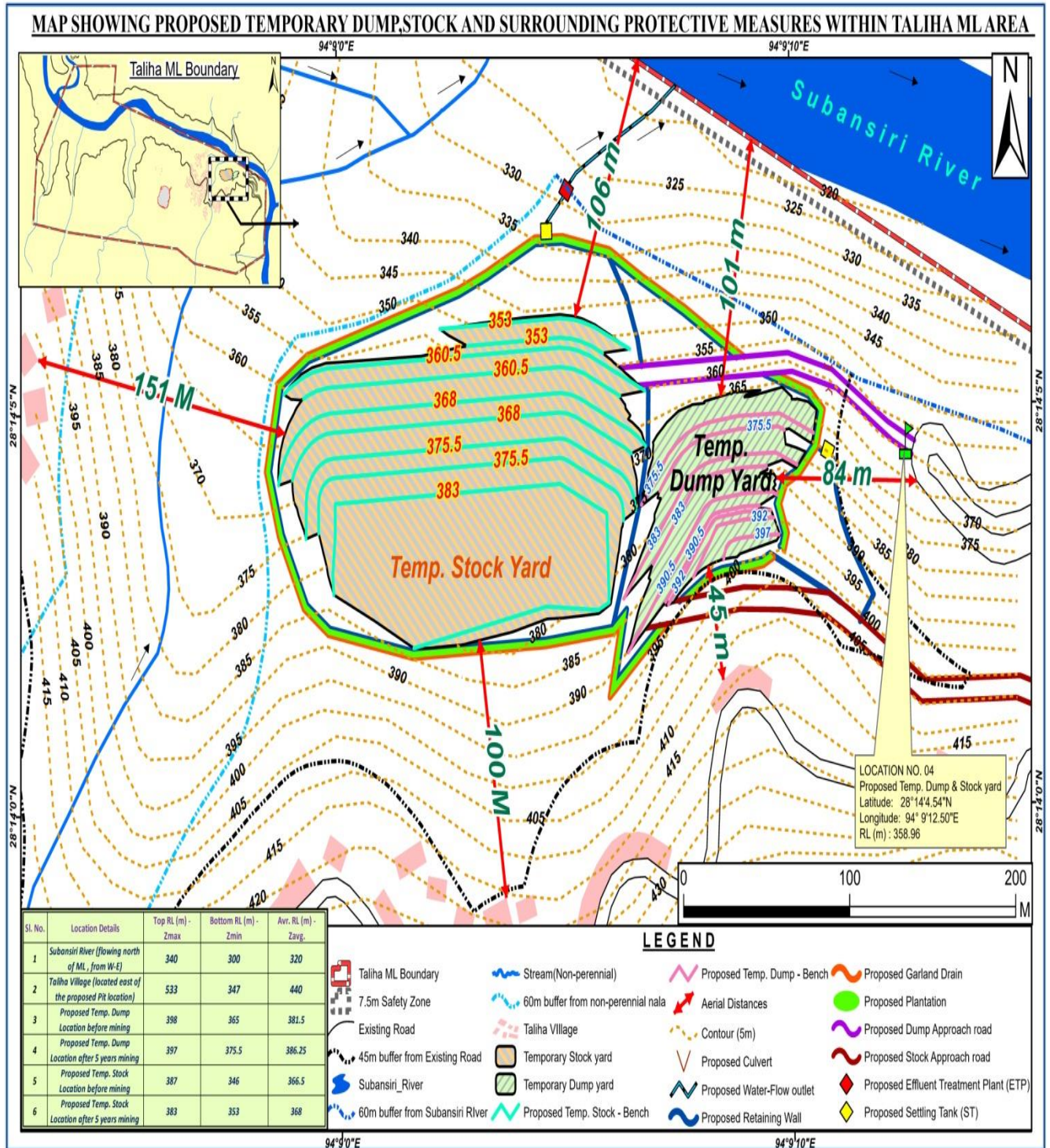
15. Furthermore, the list containing RL (m) of different key locations within Taliha Graphite ML area, which is shown in the attached map- Annexure-3.

Sl. No.	Location Details	Top RL (m) - Zmax	Bottom RL (m) - Zmin	Avr. RL (m) - Zavg.
1	Subansiri River (flowing north of ML , from W-E)	340	300	320
2	Taliha Village (located east of the proposed Pit location)	533	347	440
3	Proposed Working Pit Location before mining	652	595	624
4	Proposed Working Pit Location after 5 years of mining	650	595	623
5	Proposed Temp. Dump Location before mining	398	365	382
6	Proposed Temp. Dump Location after 5 years mining	397	375.5	386
7	Proposed Temp. Stock Location before mining	387	346	367
8	Proposed Temp. Stock Location after 5 years mining	383	353	368

16. The EAC noted that the Sub-Committee of the EAC visited the field during 7-13 April, 2023. The report of the subcommittee was placed before the EAC in its EAC meeting held during 3-4 May 2023 for due deliberations. After detailed deliberations, the EAC agreed to the recommendations of the report of the sub-committee.







List of members of Expert Appraisal Committee participated through VC

S.No	Member Name	Member Address	Designation	3 rd May, 2023	4 th May, 2023
1	Dr. Dinesh Misra, IFS (Retd.)	Plot No 65, Sector 8, Gandhinagar, Gujarat, 382 008	Chairman	No	No
2	Sh. Niranjn Kumar Vasu, IFS (Retd.)	816, Shanti Nagar, Opposite Durgapur Railway Station, Jaipur-Rajasthan, 302018	Member	Yes	Yes
3	Dr. Asha Rajvanshi, Scientist 'G' (Retd.), WII	B/104/106 Rock Valley Apartments, GMS Road, Sewla Kalan, P.O. Majra, Dehradun, Uttarakhand-248171	Member	Yes	Yes
4	Shri. Avijit Ghosh (CMD- Heavy Engineering Corporation Limited) (Retd.)	Singhee Marg, A- 604 Shahadeo Tower, P.P.Compound, Ranchi 834001, Jharkhand	Member	Yes	Yes
5	Shri. Bandi Ramchandra Reddy (CMD-South Eastern Coalfields Limited)- (Retd.)	Flat No-503 A, Jyoti Cosmos, White Fields, Hi-Tech City, Kondapur, Hyderabad-500081	Member (Acting Chairman)	Yes	Yes
6	Prof. Pramod Kumar, Professor, Shri Aurobindo College, University of Delhi	Shri Aurobindo College, University of Delhi 1372, B-1, Vasant Kunj, New Delhi-110070	Member	No	No
7	Prof. Devesh Walia, Department of Environmental Studies	Department of Environmental Studies, NEHU, Shillong-793022 Meghalaya	Member	Yes	Yes
8	Dr. Suresh Tiwari Scientist-F	Indian Institute of Tropical Meteorology, Pune, New Delhi Branch, Prof. Ram Nath Viji Marg Rajinder Nagar, New Delhi - 110060	Member	No	No
9	Dr. K.G Asha Manjari, Professor, University of Mysore	10/B, "SPARSHA", 2nd Main, 2 nd Cross, Bhogadi Ind Stage, Mysore-570026, Karnataka	Member	Yes	Yes
10	Prof. Dev Dutt Sharma, Vice-Chancellor	Sardar Patel University, Mandi H.P. 175001	Member	No	No

Minutes of 14th EAC (Non-Coal Mining) meeting held during 3-4 May, 2023

11	Shri V. K. Soni, Representative of India Meteorological Department	Government of India, Ministry of Earth Sciences, India Meteorological Department, MausamBhawan, Lodi Road, New Delhi – 110003	Member	No	No
12	Shri Yogesh Kale, Representative of Indian Bureau of Mines	Controller of Mines, IBM Block D, Second Floor, Indira Bhavan, Civil Lines, Nagpur - 440001	Member	Yes	Yes
13	Shri Niaz Mohammed	Representative of Directorate General of Mines Safety	Member	Yes	Yes
14	Shri Pankaj Verma	2 nd Floor, Prithvi Block, Indira ParyawaranBhawan, MoEF&CC, Jorbagh, New Delhi- 110003.	Member Secretary	Yes	Yes
